

# SEQUENCE LISTING

<110> Wang

<120> Cloning and Characterization of the  
Broad-Spectrum Resistance Gene Pi2

<130> 035718/268948

<150> 60/455,713

<151> 2003-03-18

<150> 60/409,216

<151> 2002-09-09

<160> 15

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 2982

<212> DNA

<213> Oryza minuta

<220>

<221> CDS

<222> (1)...(2982)

<400> 1

```

atg gcg gcg gag acg gtg gtg agc atg gcg atg tcg gtg ctg ggc agc 48
Met Ala Ala Glu Thr Val Val Ser Met Ala Met Ser Val Leu Gly Ser
 1             5             10             15

gcc gtc ggg aag gcc gcc tcc gcc gcc gcc gac gag gcc acc ctc ctg 96
Ala Val Gly Lys Ala Ala Ser Ala Ala Asp Glu Ala Thr Leu Leu
      20             25             30

ctc ggc atc cag aag gag atc tgg tac atc aag gac gag ctg aaa act 144
Leu Gly Ile Gln Lys Glu Ile Trp Tyr Ile Lys Asp Glu Leu Lys Thr
      35             40             45

att cag gca ttc tta aga gct gct gaa gta aca aag aag aaa gat gac 192
Ile Gln Ala Phe Leu Arg Ala Ala Glu Val Thr Lys Lys Lys Asp Asp
      50             55             60

ttg cta aag gta tgg gca gag caa gta cga gat ctg tca tat aac att 240
Leu Leu Lys Val Trp Ala Glu Gln Val Arg Asp Leu Ser Tyr Asn Ile
      65             70             75             80

gaa gat tgc cta gac gaa ttc aag gtt cat gtt gag agc caa agc ttg 288
Glu Asp Cys Leu Asp Glu Phe Lys Val His Val Glu Ser Gln Ser Leu
      85             90             95

gca aag caa cta atg aag ctt ggt gaa cgc cat cga att gct gta cag 336
Ala Lys Gln Leu Met Lys Leu Gly Glu Arg His Arg Ile Ala Val Gln
      100            105            110

att cgc aac tta aaa tca aga att gaa gaa gtg agc aac agg aat aca 384
Ile Arg Asn Leu Lys Ser Arg Ile Glu Glu Val Ser Asn Arg Asn Thr
      115            120            125

```

cgc tac agc tta atc aag ccc att tcc tct ata acc aca gag gat gag	432
Arg Tyr Ser Leu Ile Lys Pro Ile Ser Ser Ile Thr Thr Glu Asp Glu	
130 135 140	
agg gat tcc tac cta gaa gat gct cgc aat cga tca ggt agc aac act	480
Arg Asp Ser Tyr Leu Glu Asp Ala Arg Asn Arg Ser Gly Ser Asn Thr	
145 150 155 160	
gac gag tca gaa ctt gtg ggc ttt gcc aag act aaa gat gag ttg ctt	528
Asp Glu Ser Glu Leu Val Gly Phe Ala Lys Thr Lys Asp Glu Leu Leu	
165 170 175	
aaa ctg ata gat gtc aat act aat gac ggt cca gct aaa gtg ata tgt	576
Lys Leu Ile Asp Val Asn Thr Asn Asp Gly Pro Ala Lys Val Ile Cys	
180 185 190	
gtg gtt ggt atg ggt gga tta ggc aag act acc ctt gca agg aag gca	624
Val Val Gly Met Gly Gly Leu Gly Lys Thr Thr Leu Ala Arg Lys Ala	
195 200 205	
tat gaa aac aag gaa cac atg aag aac ttc tcg tgt tgt gct tgg atc	672
Tyr Glu Asn Lys Glu His Met Lys Asn Phe Ser Cys Cys Ala Trp Ile	
210 215 220	
act gtg tct cag tca ttt gac agg aaa gaa att ctg aaa caa atg atc	720
Thr Val Ser Gln Ser Phe Asp Arg Lys Glu Ile Leu Lys Gln Met Ile	
225 230 235 240	
agg caa ctt ctg ggt gct gat tca tta gac aaa ctc ttg aaa gaa ttt	768
Arg Gln Leu Leu Gly Ala Asp Ser Leu Asp Lys Leu Leu Lys Glu Phe	
245 250 255	
agt gag aag ttg ctc gtg caa gtc cag cat ctc gct gat cac ttg gtt	816
Ser Glu Lys Leu Leu Val Gln Val Gln His Leu Ala Asp His Leu Val	
260 265 270	
gaa ggg cta aag gag aaa agg tac ttt gtt gtc ctt gat gac cta tgg	864
Glu Gly Leu Lys Glu Lys Arg Tyr Phe Val Val Leu Asp Asp Leu Trp	
275 280 285	
acc ata gat gca tgg aat tgg att cat gat att gct ttt ccg aag att	912
Thr Ile Asp Ala Trp Asn Trp Ile His Asp Ile Ala Phe Pro Lys Ile	
290 295 300	
aac aac aga ggt agt cgc ata ata ata aca acg cga gat gct ggc tta	960
Asn Asn Arg Gly Ser Arg Ile Ile Ile Thr Thr Arg Asp Ala Gly Leu	
305 310 315 320	
gct gga agg tgt acc tct gaa tca ctt att tac cac ctt gaa ccg tta	1008
Ala Gly Arg Cys Thr Ser Glu Ser Leu Ile Tyr His Leu Glu Pro Leu	
325 330 335	
cat ata gat gat gct ata cac ttg cta cta gca aag aca aac ata aga	1056
His Ile Asp Asp Ala Ile His Leu Leu Leu Ala Lys Thr Asn Ile Arg	
340 345 350	
ctt gaa gac atg gaa aat gat gag gac ttg ggc agc ata gtt aca aaa	1104
Leu Glu Asp Met Glu Asn Asp Glu Asp Leu Gly Ser Ile Val Thr Lys	
355 360 365	
ttg gtg aaa agg tgt ggt tat tta ccg ctg gct ata ctc aca ata gga	1152
Leu Val Lys Arg Cys Gly Tyr Leu Pro Leu Ala Ile Leu Thr Ile Gly	
370 375 380	

ggc att ctt gct act aag aag ata atg gag tgg gga aaa ttt tac aga	1200
Gly Ile Leu Ala Thr Lys Lys Ile Met Glu Trp Gly Lys Phe Tyr Arg	
385 390 395 400	
gaa ctt cct tca gag ctt gag agc aat cca agc cta gaa gcc atg agg	1248
Glu Leu Pro Ser Glu Leu Glu Ser Asn Pro Ser Leu Glu Ala Met Arg	
405 410 415	
agg atg gtg acc cta agc tac aat cac tta cca tct cat ctt aaa cca	1296
Arg Met Val Thr Leu Ser Tyr Asn His Leu Pro Ser His Leu Lys Pro	
420 425 430	
tgc ttt ctt tac cta agt att ttc cct gaa gat ttt gaa att caa aga	1344
Cys Phe Leu Tyr Leu Ser Ile Phe Pro Glu Asp Phe Glu Ile Gln Arg	
435 440 445	
ggg cgc ctg gta gat aga tgg ata gca gag ggt ttt gtc aga gcc aca	1392
Gly Arg Leu Val Asp Arg Trp Ile Ala Glu Gly Phe Val Arg Ala Thr	
450 455 460	
gat ggg gtg aac att gag gat gtt gga aat agt cac ttt aat gag ctt	1440
Asp Gly Val Asn Ile Glu Asp Val Gly Asn Ser His Phe Asn Glu Leu	
465 470 475 480	
atc aac aga agt ctg att cag ccc tca aaa gtt agt aca gat gga gtt	1488
Ile Asn Arg Ser Leu Ile Gln Pro Ser Lys Val Ser Thr Asp Gly Val	
485 490 495	
gtt aag aga tgt cga atc cat gat atc atg cgt gat atc ata gtt tca	1536
Val Lys Arg Cys Arg Ile His Asp Ile Met Arg Asp Ile Ile Val Ser	
500 505 510	
att tct aga gag gaa aat ttt gtg ctg ttg act agg gag aag atc act	1584
Ile Ser Arg Glu Glu Asn Phe Val Leu Leu Thr Arg Glu Lys Ile Thr	
515 520 525	
gtt gta gcg gag gag agc atc cgc cat cta gca ttt cat ggg agc aaa	1632
Val Val Ala Glu Glu Ser Ile Arg His Leu Ala Phe His Gly Ser Lys	
530 535 540	
tgc tca aag ata tgc ttg gag tgg aac cat ctg cgc tca gta act ttg	1680
Cys Ser Lys Ile Cys Leu Glu Trp Asn His Leu Arg Ser Val Thr Leu	
545 550 555 560	
ttt ggc gac aga cct gtg ggg cga aca cct gca ctt tgt tca cca caa	1728
Phe Gly Asp Arg Pro Val Gly Arg Thr Pro Ala Leu Cys Ser Pro Gln	
565 570 575	
ttt agg atg ctg aga gtg ttg gat ctg gaa gat gca aaa ttc aaa ttc	1776
Phe Arg Met Leu Arg Val Leu Asp Leu Glu Asp Ala Lys Phe Lys Phe	
580 585 590	
aca caa aat gat atc aga aat ata ggg ttg ttg cgc cac atg aaa tat	1824
Thr Gln Asn Asp Ile Arg Asn Ile Gly Leu Leu Arg His Met Lys Tyr	
595 600 605	
ttg aat ttt gca aga gcc tca act att tat aca ctt cca agg tcc ata	1872
Leu Asn Phe Ala Arg Ala Ser Thr Ile Tyr Thr Leu Pro Arg Ser Ile	
610 615 620	
gga aaa ttg cag tgc ttg caa att ttg aac atg agg gag gca aat atc	1920
Gly Lys Leu Gln Cys Leu Gln Ile Leu Asn Met Arg Glu Ala Asn Ile	

625	630	635	640	
tca gca cta aca act gag gtg act aaa ctc cag aat ctc cgt agc ctc				1968
Ser Ala Leu Thr Thr Glu Val Thr Lys Leu Gln Asn Leu Arg Ser Leu	645	650	655	
cga tgc agc agg agg tct ggt tct ggt tac ttt agc ata ata gat aat				2016
Arg Cys Ser Arg Arg Ser Gly Ser Gly Tyr Phe Ser Ile Ile Asp Asn	660	665	670	
ccc aag gaa tgc ttg atg atc acc atg tgc tta ccg atg gtt ttc tta				2064
Pro Lys Glu Cys Leu Met Ile Thr Met Cys Leu Pro Met Val Phe Leu	675	680	685	
act tca ata aat ttc agt gac cgt gtg aag tta att cct gag ata tgc				2112
Thr Ser Ile Asn Phe Ser Asp Arg Val Lys Leu Ile Pro Glu Ile Cys	690	695	700	
atg tca tgt tct acc cgt tgg tct gat aca aag ggt gtg agg gtg cca				2160
Met Ser Cys Ser Thr Arg Trp Ser Asp Thr Lys Gly Val Arg Val Pro	705	710	715	720
aga gga att gac aac cta aaa gag tta cag att cta gaa gtc gtg gac				2208
Arg Gly Ile Asp Asn Leu Lys Glu Leu Gln Ile Leu Glu Val Val Asp	725	730	735	
atc aac aga act agt agg aag gcg att gaa gag ctg ggg gag cta att				2256
Ile Asn Arg Thr Ser Arg Lys Ala Ile Glu Glu Leu Gly Glu Leu Ile	740	745	750	
cag tta aga aaa tta agc gtg aca aca aaa ggc gcc aca aat aag aag				2304
Gln Leu Arg Lys Leu Ser Val Thr Thr Lys Gly Ala Thr Asn Lys Lys	755	760	765	
tat cag ata ttt tgt gca gcg att gag aag ctc tct tct ctg caa tct				2352
Tyr Gln Ile Phe Cys Ala Ala Ile Glu Lys Leu Ser Ser Leu Gln Ser	770	775	780	
ctc cgt gtg gat gct gag gga ttc tca gat act gga aca ctt gag tgg				2400
Leu Arg Val Asp Ala Glu Gly Phe Ser Asp Thr Gly Thr Leu Glu Trp	785	790	795	800
ctc aat tcg att gca tgt cct cct cca ttc ttg aag aga ctc aag ttg				2448
Leu Asn Ser Ile Ala Cys Pro Pro Pro Phe Leu Lys Arg Leu Lys Leu	805	810	815	
aat gga tct ctt gca gat aca cca aac tgg ttt ggg aac ctt aag cag				2496
Asn Gly Ser Leu Ala Asp Thr Pro Asn Trp Phe Gly Asn Leu Lys Gln	820	825	830	
ctg gtg aag atg tgc tta tcc aga tgt ggg cta aaa gat ggt aaa act				2544
Leu Val Lys Met Cys Leu Ser Arg Cys Gly Leu Lys Asp Gly Lys Thr	835	840	845	
atg gag ata ctt ggg gca ctg ccc aac ctt atg gtt ctt cgt ctt tat				2592
Met Glu Ile Leu Gly Ala Leu Pro Asn Leu Met Val Leu Arg Leu Tyr	850	855	860	
cgc aac gca tat gct gac gag aaa atg aca ttc aga agg gga act ttc				2640
Arg Asn Ala Tyr Ala Asp Glu Lys Met Thr Phe Arg Arg Gly Thr Phe	865	870	875	880
cca aat ctc agg tgt ctt gat att tac ttg ctg aag caa ctt aga gag				2688

Pro	Asn	Leu	Arg	Cys	Leu	Asp	Ile	Tyr	Leu	Leu	Lys	Gln	Leu	Arg	Glu		
				885					890					895			
ata	aga	ttt	gag	gag	ggc	acc	tcg	cca	acg	atg	gaa	agt	ata	gaa	att	2736	
Ile	Arg	Phe	Glu	Glu	Gly	Thr	Ser	Pro	Thr	Met	Glu	Ser	Ile	Glu	Ile		
			900					905					910				
tat	ggc	tgc	agg	ttg	gaa	tca	ggg	att	att	ggc	atc	aag	cac	ctt	cca	2784	
Tyr	Gly	Cys	Arg	Leu	Glu	Ser	Gly	Ile	Ile	Gly	Ile	Lys	His	Leu	Pro		
		915					920				925						
aga	ctt	aag	att	att	tcg	ctt	gaa	tat	gat	ggc	aaa	gtc	gcg	aag	ctt	2832	
Arg	Leu	Lys	Ile	Ile	Ser	Leu	Glu	Tyr	Asp	Gly	Lys	Val	Ala	Lys	Leu		
	930					935					940						
gat	gtg	ctg	caa	gag	gaa	gtg	aat	aca	cac	ccc	aat	cat	act	gaa	ttg	2880	
Asp	Val	Leu	Gln	Glu	Glu	Val	Asn	Thr	His	Pro	Asn	His	Thr	Glu	Leu		
	945			950					955					960			
caa	atg	gca	gag	gat	cga	agt	cat	cat	gac	cta	gga	ggc	ctt	gca	tct	2928	
Gln	Met	Ala	Glu	Asp	Arg	Ser	His	His	Asp	Leu	Gly	Gly	Leu	Ala	Ser		
			965					970					975				
gat	ggc	gat	gat	gcc	cat	gac	aat	cca	gcg	ttg	cgc	tat	caa	aca	tca	2976	
Asp	Gly	Asp	Asp	Ala	His	Asp	Asn	Pro	Ala	Leu	Arg	Tyr	Gln	Thr	Ser		
			980				985						990				
tgt	tga															2982	
Cys	*																

<210> 2  
 <211> 993  
 <212> PRT  
 <213> Oryza minuta

<400> 2																
Met	Ala	Ala	Glu	Thr	Val	Val	Ser	Met	Ala	Met	Ser	Val	Leu	Gly	Ser	
1				5					10					15		
Ala	Val	Gly	Lys	Ala	Ala	Ser	Ala	Ala	Asp	Glu	Ala	Thr	Leu	Leu		
			20				25					30				
Leu	Gly	Ile	Gln	Lys	Glu	Ile	Trp	Tyr	Ile	Lys	Asp	Glu	Leu	Lys	Thr	
		35				40					45					
Ile	Gln	Ala	Phe	Leu	Arg	Ala	Ala	Glu	Val	Thr	Lys	Lys	Lys	Asp	Asp	
	50				55			60								
Leu	Leu	Lys	Val	Trp	Ala	Glu	Gln	Val	Arg	Asp	Leu	Ser	Tyr	Asn	Ile	
65				70				75						80		
Glu	Asp	Cys	Leu	Asp	Glu	Phe	Lys	Val	His	Val	Glu	Ser	Gln	Ser	Leu	
			85					90					95			
Ala	Lys	Gln	Leu	Met	Lys	Leu	Gly	Glu	Arg	His	Arg	Ile	Ala	Val	Gln	
		100					105					110				
Ile	Arg	Asn	Leu	Lys	Ser	Arg	Ile	Glu	Glu	Val	Ser	Asn	Arg	Asn	Thr	
	115				120						125					
Arg	Tyr	Ser	Leu	Ile	Lys	Pro	Ile	Ser	Ser	Ile	Thr	Thr	Glu	Asp	Glu	
	130				135					140						
Arg	Asp	Ser	Tyr	Leu	Glu	Asp	Ala	Arg	Asn	Arg	Ser	Gly	Ser	Asn	Thr	
145				150				155					160			
Asp	Glu	Ser	Glu	Leu	Val	Gly	Phe	Ala	Lys	Thr	Lys	Asp	Glu	Leu	Leu	
			165					170					175			
Lys	Leu	Ile	Asp	Val	Asn	Thr	Asn	Asp	Gly	Pro	Ala	Lys	Val	Ile	Cys	
		180					185					190				
Val	Val	Gly	Met	Gly	Gly	Leu	Gly	Lys	Thr	Thr	Leu	Ala	Arg	Lys	Ala	

-6-

Met Ser Cys Ser Thr Arg Trp Ser Asp Thr Lys Gly Val Arg Val Pro  
 705 710 715 720  
 Arg Gly Ile Asp Asn Leu Lys Glu Leu Gln Ile Leu Glu Val Val Asp  
 725 730 735  
 Ile Asn Arg Thr Ser Arg Lys Ala Ile Glu Glu Leu Gly Glu Leu Ile  
 740 745 750  
 Gln Leu Arg Lys Leu Ser Val Thr Thr Lys Gly Ala Thr Asn Lys Lys  
 755 760 765  
 Tyr Gln Ile Phe Cys Ala Ala Ile Glu Lys Leu Ser Ser Leu Gln Ser  
 770 775 780  
 Leu Arg Val Asp Ala Glu Gly Phe Ser Asp Thr Gly Thr Leu Glu Trp  
 785 790 795 800  
 Leu Asn Ser Ile Ala Cys Pro Pro Pro Phe Leu Lys Arg Leu Lys Leu  
 805 810 815  
 Asn Gly Ser Leu Ala Asp Thr Pro Asn Trp Phe Gly Asn Leu Lys Gln  
 820 825 830  
 Leu Val Lys Met Cys Leu Ser Arg Cys Gly Leu Lys Asp Gly Lys Thr  
 835 840 845  
 Met Glu Ile Leu Gly Ala Leu Pro Asn Leu Met Val Leu Arg Leu Tyr  
 850 855 860  
 Arg Asn Ala Tyr Ala Asp Glu Lys Met Thr Phe Arg Arg Gly Thr Phe  
 865 870 875 880  
 Pro Asn Leu Arg Cys Leu Asp Ile Tyr Leu Leu Lys Gln Leu Arg Glu  
 885 890 895  
 Ile Arg Phe Glu Glu Gly Thr Ser Pro Thr Met Glu Ser Ile Glu Ile  
 900 905 910  
 Tyr Gly Cys Arg Leu Glu Ser Gly Ile Ile Gly Ile Lys His Leu Pro  
 915 920 925  
 Arg Leu Lys Ile Ile Ser Leu Glu Tyr Asp Gly Lys Val Ala Lys Leu  
 930 935 940  
 Asp Val Leu Gln Glu Glu Val Asn Thr His Pro Asn His Thr Glu Leu  
 945 950 955 960  
 Gln Met Ala Glu Asp Arg Ser His His Asp Leu Gly Gly Leu Ala Ser  
 965 970 975  
 Asp Gly Asp Asp Ala His Asp Asn Pro Ala Leu Arg Tyr Gln Thr Ser  
 980 985 990  
 Cys

<210> 3  
 <211> 3099  
 <212> DNA  
 <213> *Oryza minuta*

<220>  
 <221> CDS  
 <222> (1)...(3099)

<400> 3  
 atg gcg gag acg gtg ctg agc atg gcg agg tcg ctg gtg ggc agt gcc 48  
 Met Ala Glu Thr Val Leu Ser Met Ala Arg Ser Leu Val Gly Ser Ala  
 1 5 10 15  
  
 atc agc aag gcc gcc tct gcc gct gcc aat gag acg agc ctc ctg ctc 96  
 Ile Ser Lys Ala Ala Ser Ala Ala Ala Asn Glu Thr Ser Leu Leu Leu  
 20 25 30  
  
 ggc gtc gag aag gac atc tgg tat atc aaa gat gag cta aaa aca atg 144  
 Gly Val Glu Lys Asp Ile Trp Tyr Ile Lys Asp Glu Leu Lys Thr Met  
 35 40 45  
  
 cag gca ttc ctt aga gct gct gaa gtt atg aaa aag aaa gat gaa cta 192

Gln	Ala	Phe	Leu	Arg	Ala	Ala	Glu	Val	Met	Lys	Lys	Lys	Asp	Glu	Leu		
50						55					60						
tta	aag	gtt	tgg	gca	gag	caa	ata	cgt	gac	ctg	tcg	tat	gac	att	gaa	240	
Leu	Lys	Val	Trp	Ala	Glu	Gln	Ile	Arg	Asp	Leu	Ser	Tyr	Asp	Ile	Glu	80	
65					70				75								
gat	tcc	ctt	gat	gaa	ttt	aaa	gtc	cat	att	gaa	agc	caa	acc	cta	ttt	288	
Asp	Ser	Leu	Asp	Glu	Phe	Lys	Val	His	Ile	Glu	Ser	Gln	Thr	Leu	Phe	95	
				85					90								
cgt	cag	ttg	gtg	aaa	ctt	aga	gag	cgc	cac	cgg	atc	gct	atc	cgt	atc	336	
Arg	Gln	Leu	Val	Lys	Leu	Arg	Glu	Arg	His	Arg	Ile	Ala	Ile	Arg	Ile	110	
			100					105									
cac	aac	ctc	aaa	tca	aga	gtt	gaa	gaa	gtg	agt	agc	agg	aac	aca	cgc	384	
His	Asn	Leu	Lys	Ser	Arg	Val	Glu	Glu	Val	Ser	Ser	Arg	Asn	Thr	Arg	125	
		115						120									
tac	aat	tta	gtc	gag	cct	att	tcc	tcc	ggc	aca	gag	gat	gac	atg	gat	432	
Tyr	Asn	Leu	Val	Glu	Pro	Ile	Ser	Ser	Gly	Thr	Glu	Asp	Asp	Met	Asp	140	
		130				135											
tcc	tat	gca	gaa	gac	att	cgc	aat	caa	tca	gct	cga	aat	gtg	gat	gaa	480	
Ser	Tyr	Ala	Glu	Asp	Ile	Arg	Asn	Gln	Ser	Ala	Arg	Asn	Val	Asp	Glu	160	
145					150					155							
gct	gag	ctt	gtt	ggg	ttt	tct	gac	tcc	aag	aaa	agg	ctg	ctt	gaa	atg	528	
Ala	Glu	Leu	Val	Gly	Phe	Ser	Asp	Ser	Lys	Lys	Arg	Leu	Leu	Glu	Met	175	
				165					170								
atc	gat	acc	aat	gct	aat	gat	ggc	ccg	gcc	aag	gta	atc	tgt	gtt	gtt	576	
Ile	Asp	Thr	Asn	Ala	Asn	Asp	Gly	Pro	Ala	Lys	Val	Ile	Cys	Val	Val	190	
			180					185									
ggg	atg	ggc	ggc	tta	ggc	aag	aca	gct	ctt	tcg	agg	aag	atc	ttt	gaa	624	
Gly	Met	Gly	Gly	Leu	Gly	Lys	Thr	Ala	Leu	Ser	Arg	Lys	Ile	Phe	Glu	205	
		195					200										
agc	gaa	gaa	gac	att	agg	aag	aac	ttc	cct	tgc	aat	gct	tgg	att	aca	672	
Ser	Glu	Glu	Asp	Ile	Arg	Lys	Asn	Phe	Pro	Cys	Asn	Ala	Trp	Ile	Thr	220	
		210				215											
gtg	tca	caa	tca	ttt	cac	agg	att	gag	cta	ctt	aaa	gat	atg	ata	cgc	720	
Val	Ser	Gln	Ser	Phe	His	Arg	Ile	Glu	Leu	Leu	Lys	Asp	Met	Ile	Arg	240	
225					230					235							
caa	ctt	ctt	ggc	ccc	agt	tct	ctg	gat	caa	ctc	ttg	cat	gaa	ttg	caa	768	
Gln	Leu	Leu	Gly	Pro	Ser	Ser	Leu	Asp	Gln	Leu	Leu	His	Glu	Leu	Gln	255	
				245					250								
ggg	aag	gtg	gtg	gtg	caa	gta	cat	cat	ctt	tct	gag	tac	ctg	ata	gaa	816	
Gly	Lys	Val	Val	Val	Gln	Val	His	His	Leu	Ser	Glu	Tyr	Leu	Ile	Glu	270	
		260						265									
gag	ctc	aag	gag	aag	agg	tac	ttt	gtt	gtt	cta	gat	gat	cta	tgg	att	864	
Glu	Leu	Lys	Glu	Lys	Arg	Tyr	Phe	Val	Val	Leu	Asp	Asp	Leu	Trp	Ile	285	
		275					280										
tta	cat	gat	tgg	aat	tgg	ata	aat	gaa	att	gca	ttt	cct	aag	aac	aat	912	
Leu	His	Asp	Trp	Asn	Trp	Ile	Asn	Glu	Ile	Ala	Phe	Pro	Lys	Asn	Asn	300	
		290				295											



aag aag ggc agt cga ata gta ata acc act cgg aat gtt gat cta gcg	960
Lys Lys Gly Ser Arg Ile Val Ile Thr Thr Arg Asn Val Asp Leu Ala	
305 310 315 320	
gag aag tgt gcc aca gcc tca ctg gtg tac cac ctt gat ttc ttg cag	1008
Glu Lys Cys Ala Thr Ala Ser Leu Val Tyr His Leu Asp Phe Leu Gln	
325 330 335	
atg aac gat gcc att tca ttg cta ctg aga aaa aca aat aaa aat cat	1056
Met Asn Asp Ala Ile Ser Leu Leu Arg Lys Thr Asn Lys Asn His	
340 345 350	
gaa gac atg gaa tca aat aaa aat atg caa aag atg gtt gaa cga att	1104
Glu Asp Met Glu Ser Asn Lys Asn Met Gln Lys Met Val Glu Arg Ile	
355 360 365	
gta aat aaa tgt ggt cgt cta cca tta gca ata ctt aca ata gga gct	1152
Val Asn Lys Cys Gly Arg Leu Pro Leu Ala Ile Leu Thr Ile Gly Ala	
370 375 380	
gtg ctt gca act aaa cag gtg tca gaa tgg gag aaa ttc tat gaa caa	1200
Val Leu Ala Thr Lys Gln Val Ser Glu Trp Glu Lys Phe Tyr Glu Gln	
385 390 395 400	
ctt cct tca gaa cta gaa ata aac cca agc ctg gaa gct ttg agg aga	1248
Leu Pro Ser Glu Leu Glu Ile Asn Pro Ser Leu Glu Ala Leu Arg Arg	
405 410 415	
atg gtg acc cta ggt tac aac cac cta cca tcc cat ctg aaa cca tgc	1296
Met Val Thr Leu Gly Tyr Asn His Leu Pro Ser His Leu Lys Pro Cys	
420 425 430	
ttt ttg tat cta agt atc ttt cct gag gat ttt gaa ata caa agg aat	1344
Phe Leu Tyr Leu Ser Ile Phe Pro Glu Asp Phe Glu Ile Gln Arg Asn	
435 440 445	
cgt cta gta ggt aga tgg ata gca gaa ggg ttt gtt aga cca aag gtt	1392
Arg Leu Val Gly Arg Trp Ile Ala Glu Gly Phe Val Arg Pro Lys Val	
450 455 460	
ggg atg acg act aag gat gtc gga gaa agt tac ttt aat gag cta atc	1440
Gly Met Thr Thr Lys Asp Val Gly Glu Ser Tyr Phe Asn Glu Leu Ile	
465 470 475 480	
aac cga agt atg att caa cga tca aga gtg ggc aca gca gga aaa att	1488
Asn Arg Ser Met Ile Gln Arg Ser Arg Val Gly Thr Ala Gly Lys Ile	
485 490 495	
aag act tgt cga atc cat gat atc atc cgt gat atc aca gtt tca atc	1536
Lys Thr Cys Arg Ile His Asp Ile Ile Arg Asp Ile Thr Val Ser Ile	
500 505 510	
tcg aga cag gaa aat ttt gta tta tta cca atg gga gat ggc tct gat	1584
Ser Arg Gln Glu Asn Phe Val Leu Leu Pro Met Gly Asp Gly Ser Asp	
515 520 525	
tta gtt cag gaa aac act cgc cac ata gca ttc cat ggg agt atg tcc	1632
Leu Val Gln Glu Asn Thr Arg His Ile Ala Phe His Gly Ser Met Ser	
530 535 540	
tgc aaa aca gga ttg gat tgg agc att att cga tca tta gct att ttt	1680
Cys Lys Thr Gly Leu Asp Trp Ser Ile Ile Arg Ser Leu Ala Ile Phe	
545 550 555 560	

ggt gac aga ccc aag agt cta gca cat gca gtt tgt cca gat caa ttg	1728
Gly Asp Arg Pro Lys Ser Leu Ala His Ala Val Cys Pro Asp Gln Leu	
565 570 575	
agg atg tta cgg gtc ttg gat ctt gaa gat gtg aca ttc tta atc act	1776
Arg Met Leu Arg Val Leu Asp Leu Glu Asp Val Thr Phe Leu Ile Thr	
580 585 590	
caa aaa gat ttc gac cgt att gca ttg ttg tgc cac ttg aaa tac ttg	1824
Gln Lys Asp Phe Asp Arg Ile Ala Leu Leu Cys His Leu Lys Tyr Leu	
595 600 605	
agt att gga tat tcg tca tcc ata tat tca ctt ccc aga tcc att ggt	1872
Ser Ile Gly Tyr Ser Ser Ser Ile Tyr Ser Leu Pro Arg Ser Ile Gly	
610 615 620	
aaa cta cag ggc cta cag act ttg aac atg tca agc aca tac att gca	1920
Lys Leu Gln Gly Leu Gln Thr Leu Asn Met Ser Ser Thr Tyr Ile Ala	
625 630 635 640	
gca cta cca agt gag atc agt aaa ctc caa tgt ctg cat act ctt cgt	1968
Ala Leu Pro Ser Glu Ile Ser Lys Leu Gln Cys Leu His Thr Leu Arg	
645 650 655	
tgt ata aga gag ctt gaa ttt gac aac ttt agt cta aat cac cca atg	2016
Cys Ile Arg Glu Leu Glu Phe Asp Asn Phe Ser Leu Asn His Pro Met	
660 665 670	
aag tgc ata act aac aca ata tgc ctg cct aaa gta ttc aca cct tta	2064
Lys Cys Ile Thr Asn Thr Ile Cys Leu Pro Lys Val Phe Thr Pro Leu	
675 680 685	
gtt agt cgc gat aat cgt gca aaa caa att gct gaa ttt cac atg gcc	2112
Val Ser Arg Asp Asn Arg Ala Lys Gln Ile Ala Glu Phe His Met Ala	
690 695 700	
acc aaa agt ttc tgg tct gaa tca ttc ggt gtg aag gta ccc aaa gga	2160
Thr Lys Ser Phe Trp Ser Glu Ser Phe Gly Val Lys Val Pro Lys Gly	
705 710 715 720	
ata ggt aag ttg cga gac tta cag gtt cta gag tat gta gat atc agg	2208
Ile Gly Lys Leu Arg Asp Leu Gln Val Leu Glu Tyr Val Asp Ile Arg	
725 730 735	
cgg acc agt agt aga gca atc aaa gag ctg ggg cag tta agc aag ttg	2256
Arg Thr Ser Ser Arg Ala Ile Lys Glu Leu Gly Gln Leu Ser Lys Leu	
740 745 750	
agg aaa tta gct gtg ata aca aaa ggc tcg aca aag gaa aaa tgt aag	2304
Arg Lys Leu Ala Val Ile Thr Lys Gly Ser Thr Lys Glu Lys Cys Lys	
755 760 765	
ata ctt tat gca gcc att gag aag ctc tct tcc ctc caa tct ctc tat	2352
Ile Leu Tyr Ala Ala Ile Glu Lys Leu Ser Ser Leu Gln Ser Leu Tyr	
770 775 780	
atg aat gct gcg tta tta tca gat att gaa aca ctt gag tgc cta gat	2400
Met Asn Ala Ala Leu Leu Ser Asp Ile Glu Thr Leu Glu Cys Leu Asp	
785 790 795 800	
tct att tca tct cct cct ccc cta ctg agg aca ctc ggg ttg aat gga	2448
Ser Ile Ser Ser Pro Pro Pro Leu Leu Arg Thr Leu Gly Leu Asn Gly	

805	810	815	
agt ctt gaa gag atg cct aac tgg att gag cag ctc act cac ctg aag Ser Leu Glu Glu Met Pro Asn Trp Ile Glu Gln Leu Thr His Leu Lys 820 825 830			2496
aag ttc aac tta tgg agt agt aaa cta aag gaa ggt aaa aac atg ctg Lys Phe Asn Leu Trp Ser Ser Lys Leu Lys Glu Gly Lys Asn Met Leu 835 840 845			2544
ata ctt ggg gca ctg ccc aac ctc atg ttc ctt tct ctt tat cat aat Ile Leu Gly Ala Leu Pro Asn Leu Met Phe Leu Ser Leu Tyr His Asn 850 855 860			2592
tct tat ctt ggg gag aag cta gta ttc aaa acg gga gca ttc cca aat Ser Tyr Leu Gly Glu Lys Leu Val Phe Lys Thr Gly Ala Phe Pro Asn 865 870 875 880			2640
ctt aga aca ctt gtg att ttc aat ttg gat cag cta aga gag atc aga Leu Arg Thr Leu Val Ile Phe Asn Leu Asp Gln Leu Arg Glu Ile Arg 885 890 895			2688
ttt gag gac ggc agc tca ccc cag ttg gaa aag ata gaa atc tct tgc Phe Glu Asp Gly Ser Ser Pro Gln Leu Glu Lys Ile Glu Ile Ser Cys 900 905 910			2736
tgc agg ttg gaa tca ggg att att ggt atc att cac ctt cca agg ctc Cys Arg Leu Glu Ser Gly Ile Ile Gly Ile Ile His Leu Pro Arg Leu 915 920 925			2784
aag gag att tca ctt gaa tac aaa agt aaa gtg gct agg ctt ggt cag Lys Glu Ile Ser Leu Glu Tyr Lys Ser Lys Val Ala Arg Leu Gly Gln 930 935 940			2832
ctg aag gga gaa gtg aac aca cac cca aat cgc ccc gtg ctg cga atg Leu Lys Gly Glu Val Asn Thr His Pro Asn Arg Pro Val Leu Arg Met 945 950 955 960			2880
gac agt gac cga agg gat cac gac ctg ggg gct gaa gcc gaa gga tct Asp Ser Asp Arg Arg Asp His Asp Leu Gly Ala Glu Ala Glu Gly Ser 965 970 975			2928
tct ata gaa gtg caa aca gca gat cct gtt cct gat gcc caa gga tca Ser Ile Glu Val Gln Thr Ala Asp Pro Val Pro Asp Ala Gln Gly Ser 980 985 990			2976
gtc act gta gca gtg gaa gca acg gat ccc ctt ccc gag cag gag gga Val Thr Val Ala Val Glu Ala Thr Asp Pro Leu Pro Glu Gln Glu Gly 995 1000 1005			3024
gag agc tcg cag tcg cag gtg atc acg ttg acg acg aat gat agc gaa Glu Ser Ser Gln Ser Gln Val Ile Thr Leu Thr Thr Asn Asp Ser Glu 1010 1015 1020			3072
gag ata ggc aca gct caa gct ggc tga Glu Ile Gly Thr Ala Gln Ala Gly * 1025 1030			3099

<210> 4  
 <211> 1032  
 <212> PRT  
 <213> Oryza minuta

<400> 4

```

Met Ala Glu Thr Val Leu Ser Met Ala Arg Ser Leu Val Gly Ser Ala
 1          5          10          15
Ile Ser Lys Ala Ala Ser Ala Ala Asn Glu Thr Ser Leu Leu Leu
 20          25          30
Gly Val Glu Lys Asp Ile Trp Tyr Ile Lys Asp Glu Leu Lys Thr Met
 35          40          45
Gln Ala Phe Leu Arg Ala Ala Glu Val Met Lys Lys Lys Asp Glu Leu
 50          55          60
Leu Lys Val Trp Ala Glu Gln Ile Arg Asp Leu Ser Tyr Asp Ile Glu
 65          70          75          80
Asp Ser Leu Asp Glu Phe Lys Val His Ile Glu Ser Gln Thr Leu Phe
 85          90          95
Arg Gln Leu Val Lys Leu Arg Glu Arg His Arg Ile Ala Ile Arg Ile
100          105          110
His Asn Leu Lys Ser Arg Val Glu Glu Val Ser Ser Arg Asn Thr Arg
115          120          125
Tyr Asn Leu Val Glu Pro Ile Ser Ser Gly Thr Glu Asp Asp Met Asp
130          135          140
Ser Tyr Ala Glu Asp Ile Arg Asn Gln Ser Ala Arg Asn Val Asp Glu
145          150          155          160
Ala Glu Leu Val Gly Phe Ser Asp Ser Lys Lys Arg Leu Leu Glu Met
165          170          175
Ile Asp Thr Asn Ala Asn Asp Gly Pro Ala Lys Val Ile Cys Val Val
180          185          190
Gly Met Gly Gly Leu Gly Lys Thr Ala Leu Ser Arg Lys Ile Phe Glu
195          200          205
Ser Glu Glu Asp Ile Arg Lys Asn Phe Pro Cys Asn Ala Trp Ile Thr
210          215          220
Val Ser Gln Ser Phe His Arg Ile Glu Leu Leu Lys Asp Met Ile Arg
225          230          235          240
Gln Leu Leu Gly Pro Ser Ser Leu Asp Gln Leu Leu His Glu Leu Gln
245          250          255
Gly Lys Val Val Val Gln Val His His Leu Ser Glu Tyr Leu Ile Glu
260          265          270
Glu Leu Lys Glu Lys Arg Tyr Phe Val Val Leu Asp Asp Leu Trp Ile
275          280          285
Leu His Asp Trp Asn Trp Ile Asn Glu Ile Ala Phe Pro Lys Asn Asn
290          295          300
Lys Lys Gly Ser Arg Ile Val Ile Thr Thr Arg Asn Val Asp Leu Ala
305          310          315          320
Glu Lys Cys Ala Thr Ala Ser Leu Val Tyr His Leu Asp Phe Leu Gln
325          330          335
Met Asn Asp Ala Ile Ser Leu Leu Leu Arg Lys Thr Asn Lys Asn His
340          345          350
Glu Asp Met Glu Ser Asn Lys Asn Met Gln Lys Met Val Glu Arg Ile
355          360          365
Val Asn Lys Cys Gly Arg Leu Pro Leu Ala Ile Leu Thr Ile Gly Ala
370          375          380
Val Leu Ala Thr Lys Gln Val Ser Glu Trp Glu Lys Phe Tyr Glu Gln
385          390          395          400
Leu Pro Ser Glu Leu Glu Ile Asn Pro Ser Leu Glu Ala Leu Arg Arg
405          410          415
Met Val Thr Leu Gly Tyr Asn His Leu Pro Ser His Leu Lys Pro Cys
420          425          430
Phe Leu Tyr Leu Ser Ile Phe Pro Glu Asp Phe Glu Ile Gln Arg Asn
435          440          445
Arg Leu Val Gly Arg Trp Ile Ala Glu Gly Phe Val Arg Pro Lys Val
450          455          460
Gly Met Thr Thr Lys Asp Val Gly Glu Ser Tyr Phe Asn Glu Leu Ile
465          470          475          480
Asn Arg Ser Met Ile Gln Arg Ser Arg Val Gly Thr Ala Gly Lys Ile

```



Val Thr Val Ala Val Glu Ala Thr Asp Pro Leu Pro Glu Gln Glu Gly  
 995 1000 1005  
 Glu Ser Ser Gln Ser Gln Val Ile Thr Leu Thr Thr Asn Asp Ser Glu  
 1010 1015 1020  
 Glu Ile Gly Thr Ala Gln Ala Gly  
 1025 1030

<210> 5  
 <211> 4147  
 <212> DNA  
 <213> *Oryza minuta*

<220>  
 <221> CDS  
 <222> (1)...(1983)

<400> 5  
 atg gcg gat aca gta ctc agc att gca aag tcc ctg gtg gga agt gct 48  
 Met Ala Asp Thr Val Leu Ser Ile Ala Lys Ser Leu Val Gly Ser Ala  
 1 5 10 15  
 gta agc aag gtt gct tcg gtt gcc gca gac aag atg atc atg ctg ctg 96  
 Val Ser Lys Val Ala Ser Val Ala Ala Asp Lys Met Ile Met Leu Leu  
 20 25 30  
 gga gtg cag aag gag ata tgg ttc atc aaa gat gag cta caa acg ata 144  
 Gly Val Gln Lys Glu Ile Trp Phe Ile Lys Asp Glu Leu Gln Thr Ile  
 35 40 45  
 caa gca ttt ttg att gct gcc gaa gca tca aag aaa agc ata cta ttg 192  
 Gln Ala Phe Leu Ile Ala Ala Glu Ala Ser Lys Lys Ser Ile Leu Leu  
 50 55 60  
 aag gtt tgg gtg cag caa gta agg gat ctt tcc tat gac atc gaa gat 240  
 Lys Val Trp Val Gln Gln Val Arg Asp Leu Ser Tyr Asp Ile Glu Asp  
 65 70 75 80  
 tgc ctt gat gaa ttt aca gtt cat gtg ggc agc caa aac ttg tcg agg 288  
 Cys Leu Asp Glu Phe Thr Val His Val Gly Ser Gln Asn Leu Ser Arg  
 85 90 95  
 cag ttg atg aag cta aag gat cgc cat cgg att gcc atc cag atc cgc 336  
 Gln Leu Met Lys Leu Lys Asp Arg His Arg Ile Ala Ile Gln Ile Arg  
 100 105 110  
 aat ctc agg aca aga att gaa gaa gta agc act agg aac ata cgc tac 384  
 Asn Leu Arg Thr Arg Ile Glu Glu Val Ser Thr Arg Asn Ile Arg Tyr  
 115 120 125  
 aac tta ata gag aat gac ctc acc tgc acc act gat gag agg aat tta 432  
 Asn Leu Ile Glu Asn Asp Leu Thr Cys Thr Thr Asp Glu Arg Asn Leu  
 130 135 140  
 ttt atg gaa gac att cgc aat caa tca gct aac aac atc gag gaa gct 480  
 Phe Met Glu Asp Ile Arg Asn Gln Ser Ala Asn Asn Ile Glu Glu Ala  
 145 150 155 160  
 gat ctt gtg ggt ttt tct gga ccc aaa aga gag ttg ctt gat ctt ata 528  
 Asp Leu Val Gly Phe Ser Gly Pro Lys Arg Glu Leu Leu Asp Leu Ile  
 165 170 175  
 gat gtc cat gcc aag gac gga cct aca aag gtt gta tgt gtt gtc ggt 576

Asp Val His Ala Lys Asp Gly Pro Thr Lys Val Val Cys Val Val Gly	
180 185 190	
atg ggt ggt ttg ggt aag act act att gca agg aaa att tat gaa agc	624
Met Gly Gly Leu Gly Lys Thr Thr Ile Ala Arg Lys Ile Tyr Glu Ser	
195 200 205	
aaa gag gac att gca aag aat ttt tct tgc tgt gct tgg att act gtt	672
Lys Glu Asp Ile Ala Lys Asn Phe Ser Cys Cys Ala Trp Ile Thr Val	
210 215 220	
tca cag tcc ttt gtt agg gtg gaa cta ctc aag gat ttg atg gtg aaa	720
Ser Gln Ser Phe Val Arg Val Glu Leu Leu Lys Asp Leu Met Val Lys	
225 230 235 240	
ctt ttt gga gag gaa gta ctg aag aag cgg ccg aga gaa ctc gaa ggg	768
Leu Phe Gly Glu Val Leu Lys Lys Arg Pro Arg Glu Leu Glu Gly	
245 250 255	
aag gtt cca caa gta gat gac ctt gcc agc tac ctc agg aca gag tta	816
Lys Val Pro Gln Val Asp Asp Leu Ala Ser Tyr Leu Arg Thr Glu Leu	
260 265 270	
cat gaa agg agg tac ttt gtt gtg ctt gat gac gtg tgg agt aca gat	864
His Glu Arg Arg Tyr Phe Val Val Leu Asp Asp Val Trp Ser Thr Asp	
275 280 285	
tca tgg aaa tgg att aat agt att gcc ttc cct aga aat aac aaa aaa	912
Ser Trp Lys Trp Ile Asn Ser Ile Ala Phe Pro Arg Asn Asn Lys Lys	
290 295 300	
ggg agc cgg gtg ata gta aca aca aga gat gtt ggc tta gct aag aag	960
Gly Ser Arg Val Ile Val Thr Thr Arg Asp Val Gly Leu Ala Lys Lys	
305 310 315 320	
tgt act tct gaa ttg ctt atc tac cag ctt aaa ccc cta gaa ata aac	1008
Cys Thr Ser Glu Leu Leu Ile Tyr Gln Leu Lys Pro Leu Glu Ile Asn	
325 330 335	
tat gca aaa gag ttg ctt cta cgg aaa gca aat gaa gca ata gga gat	1056
Tyr Ala Lys Glu Leu Leu Leu Arg Lys Ala Asn Glu Ala Ile Gly Asp	
340 345 350	
atg gaa agt gat aaa aag atg agt gac att ata act aaa ata gta aag	1104
Met Glu Ser Asp Lys Lys Met Ser Asp Ile Ile Thr Lys Ile Val Lys	
355 360 365	
aag tgt ggg tat tta ccg ctg gct ata ctc aca ata gga ggc gtg ctt	1152
Lys Cys Gly Tyr Leu Pro Leu Ala Ile Leu Thr Ile Gly Gly Val Leu	
370 375 380	
tcc acc aaa gag ata aga gag tgg gaa act ttt tat agt cag ata cct	1200
Ser Thr Lys Glu Ile Arg Glu Trp Glu Thr Phe Tyr Ser Gln Ile Pro	
385 390 395 400	
tca gag ctt gag agc aac cca aac ctt gaa gca atg aga agg ata gtg	1248
Ser Glu Leu Glu Ser Asn Pro Asn Leu Glu Ala Met Arg Arg Ile Val	
405 410 415	
acc cta agt tac aac tac tta ccg tct cat ctt aag caa tgc ttt ttg	1296
Thr Leu Ser Tyr Asn Tyr Leu Pro Ser His Leu Lys Gln Cys Phe Leu	
420 425 430	

tat cta agc ata ttt cct gag gat ttt gaa att aat agg aac cgt ctg	1344
Tyr Leu Ser Ile Phe Pro Glu Asp Phe Glu Ile Asn Arg Asn Arg Leu	
435 440 445	
gta aat aga tgg att gca gag ggg ttt att aaa gct agg act aat atg	1392
Val Asn Arg Trp Ile Ala Glu Gly Phe Ile Lys Ala Arg Thr Asn Met	
450 455 460	
act att gaa gat gtt ggg aaa agt tac ttt aaa gaa ctt atc aac cgt	1440
Thr Ile Glu Asp Val Gly Lys Ser Tyr Phe Lys Glu Leu Ile Asn Arg	
465 470 475 480	
agc atg att cag tca tca aga gcg ggt ata cga gga gat ttt aag agc	1488
Ser Met Ile Gln Ser Ser Arg Ala Gly Ile Arg Gly Asp Phe Lys Ser	
485 490 495	
tgt cga gtc cat gac atc atg cgt gat att aca att tcg att tct aga	1536
Cys Arg Val His Asp Ile Met Arg Asp Ile Thr Ile Ser Ile Ser Arg	
500 505 510	
gaa gaa aat ttc aca ctc tta ccc gat ggc act gac tat gat gta gta	1584
Glu Glu Asn Phe Thr Leu Leu Pro Asp Gly Thr Asp Tyr Asp Val Val	
515 520 525	
cat ggg aac act cgg cac ata gca ttt cac ggg agt agg tat tgc tct	1632
His Gly Asn Thr Arg His Ile Ala Phe His Gly Ser Arg Tyr Cys Ser	
530 535 540	
gaa aca agc ttg gac tgg agc att ata cgg tca tta act atg ttt ggt	1680
Glu Thr Ser Leu Asp Trp Ser Ile Ile Arg Ser Leu Thr Met Phe Gly	
545 550 555 560	
gag agg tcc gta gaa cta gag cat tca gtt tgt tca tct cag ttg agg	1728
Glu Arg Ser Val Glu Leu Glu His Ser Val Cys Ser Ser Gln Leu Arg	
565 570 575	
atg tta cgg gtc ttg gat cta ata gat gca caa ttt tct atc aca caa	1776
Met Leu Arg Val Leu Asp Leu Ile Asp Ala Gln Phe Ser Ile Thr Gln	
580 585 590	
aat gat gtc gac aac ata gtg ctc ttg tgc cac ttg aaa tac cta cgc	1824
Asn Asp Val Asp Asn Ile Val Leu Leu Cys His Leu Lys Tyr Leu Arg	
595 600 605	
att gca aga tac aga tac cgt tca cca tat att tat tca ctt cca caa	1872
Ile Ala Arg Tyr Arg Tyr Arg Ser Pro Tyr Ile Tyr Ser Leu Pro Gln	
610 615 620	
tcc ata gct aga ctg cat ggt ctg cag aca ttg gac ttg ggt cag acg	1920
Ser Ile Ala Arg Leu His Gly Leu Gln Thr Leu Asp Leu Gly Gln Thr	
625 630 635 640	
tac att tca aca ctg cca act cag att act aac ttc gga gtc tcc gta	1968
Tyr Ile Ser Thr Leu Pro Thr Gln Ile Thr Asn Phe Gly Val Ser Val	
645 650 655	
gcc ttc gat gca tga aagaatat ttttcttctt ttaagaacat atttaactaa	2023
Ala Phe Asp Ala *	
660	
cacattatgc ctgccatga tattcacacc ttctcgtagt acctcggatc gttctgaaac	2083
aattgctaaa ttgcacatgg ccaccaaagg cttccgttca aaatcaaata gtgtcaaggt	2143
acccaaaagga atatgtaagt tgagagactt acaagaggat tgctacggtc cagcagggtg	2203



```

taccgggagg tactgggtacc gcgcgggtacc aaaacccatc taaccggtga atccgggatg 2263
ggtaggatcg ggagagaaaa gatgagcaag ggtggatgag ggagtacctg tttcgagtcg 2323
tcgttcccgg cggcggcggc gtggagtacc tgtttcgagt cgtcgtcgtt cccggtggcg 2383
gcgcagagca acaaggggacg ccggcggcgcg gggagaggat aaagtccggc ggcagcgcg 2443
gagagaaaaa agggaacggc gacggtgctg gagaggaaca agggaaggac ggcggcgcg 2503
gaagagggaac aagtccgacg gcgaggaaga ggaacacggc ggcggcgaaa atcatccagc 2563
gtagctaggg ttcgagccgc ccgatccaaa cccatctatt gcacgcgaag ttactctttt 2623
acccttccaa ctctcttctc catgcggtat cacctaaggg acatttttgg taccgtgctg 2683
taccacgcaa catcagccgt tggatcaggc cagatccaac ggccagcatt tggtagcgct 2743
cggtagcgtt gacagtaaaa aaactcgact taaaaatatt ggaggtagtg gatattagaa 2803
ggactagcag tagagcaatc aaagagttgg ggcagttaag caagctgagg aaattatgtg 2863
tggttaacaaa gggatccaca aaggaaaaat gtgagatact ctatacagct atccagaagc 2923
tctgtttctc acaatctctc catgtgaatg ctgtgggatt ttcagggtatt ggaacacttc 2983
agtgtataga ttctatttca tctcctctc ccctactgag gacactcagg ttgaatggaa 3043
gtcttgagga gatgcctaac tggattgagc agctcacgca cctgatgaag ttcaacttat 3103
ggaggagcaa actaaaagaa ggtaaaacca tgttggtact tgcggcggtt cccaacctca 3163
tggtctttta tcttcattcc aatgcttacc atggggagaa gctagtattc aaaatgggag 3223
cattcccaaa tcttagaaca ttttcgattt acaatttgga gcagctaaga gagattagat 3283
ttgaggacgg cagctcaatc ttgttggaag agatagaaat attcaggggg tggatcagg 3343
gattgttggg atcattcacc ttccaaggct caaggagatt tcacttggat acggaagtaa 3403
agtggctagg cttggctcagc tggagggaga agtgcgaca caccacaaatc acccctgat 3463
gcgaatgagg gaggaccgaa gtgatcacga ccttgcttgt gacgccgaag gatccctgt 3523
tgaagtggaa gcaacagatc ctgtgagagc tcgcagttgc aggtgatcac gttgacaacg 3583
aacgacaggt cagtcactcc ctacacggca tcttaatgaa cttgttttat cctcttga 3643
gatcgatgat tttaactcac ccttctatct ctctcgttt cttaacctaa cagegaagag 3703
ataagcaca cttaagctgg ttgatcaag tgatgatctc ctctccatt ggcactctcg 3763
gtcgtccctg cttctgcggc tgcgcacctc gctgctctga ggaggggtgc tgatctaagg 3823
aggcttccac tttcttcaat tgcgtctcat gctctcgatt cttccctctc gggatgaat 3883
tgttcaatct gatattttct cgcgatctgc tactgggtcc agcatgagca tttgaaccag 3943
cagcttagaa ttatcgttt atcagggtgt atttatccct tcttacctgg gaactctact 4003
tatccatttc attcagaaca gaaacatgt ttattacact atagaggga acaacagatc 4063
aggcacgagt tgtggtttg ttatttctt tttggtgtgc acaccagggt attgctagaa 4123
tgtctgaaag agcttgtgtg catg 4147

```

```

<210> 6
<211> 660
<212> PRT
<213> Oryza minuta

```

```

<400> 6
Met Ala Asp Thr Val Leu Ser Ile Ala Lys Ser Leu Val Gly Ser Ala
 1          5          10          15
Val Ser Lys Val Ala Ser Val Ala Ala Asp Lys Met Ile Met Leu Leu
          20          25          30
Gly Val Gln Lys Glu Ile Trp Phe Ile Lys Asp Glu Leu Gln Thr Ile
          35          40          45
Gln Ala Phe Leu Ile Ala Ala Glu Ala Ser Lys Lys Ser Ile Leu Leu
          50          55          60
Lys Val Trp Val Gln Gln Val Arg Asp Leu Ser Tyr Asp Ile Glu Asp
          65          70          75          80
Cys Leu Asp Glu Phe Thr Val His Val Gly Ser Gln Asn Leu Ser Arg
          85          90          95
Gln Leu Met Lys Leu Lys Asp Arg His Arg Ile Ala Ile Gln Ile Arg
          100          105          110
Asn Leu Arg Thr Arg Ile Glu Glu Val Ser Thr Arg Asn Ile Arg Tyr
          115          120          125
Asn Leu Ile Glu Asn Asp Leu Thr Cys Thr Thr Asp Glu Arg Asn Leu
          130          135          140
Phe Met Glu Asp Ile Arg Asn Gln Ser Ala Asn Asn Ile Glu Glu Ala
          145          150          155          160
Asp Leu Val Gly Phe Ser Gly Pro Lys Arg Glu Leu Leu Asp Leu Ile
          165          170          175
Asp Val His Ala Lys Asp Gly Pro Thr Lys Val Val Cys Val Val Gly

```



<210> 7  
 <211> 3099  
 <212> DNA  
 <213> *Oryza minuta*

<220>  
 <221> CDS  
 <222> (1)...(3099)

```

<400> 7
atg gcg gag acg gtg ctg agc atg gcg agg tcg ctg gtg ggc agc gcc 48
Met Ala Glu Thr Val Leu Ser Met Ala Arg Ser Leu Val Gly Ser Ala
1 5 10 15

atc agc aag gcc gcc tcc gct gct gcc gac gag acc agc ctc ctg ctg 96
Ile Ser Lys Ala Ala Ser Ala Ala Asp Glu Thr Ser Leu Leu Leu
20 25 30

ggc gtc gag aaa gac atc tgg tat atc aaa gat gag cta aaa acg atg 144
Gly Val Glu Lys Asp Ile Trp Tyr Ile Lys Asp Glu Leu Lys Thr Met
35 40 45

caa gca ttc ctt aga gct gct gaa ctt atg aaa aag aaa gat gaa cta 192
Gln Ala Phe Leu Arg Ala Ala Glu Leu Met Lys Lys Lys Asp Glu Leu
50 55 60

tta aag gtt tgg gca gag caa ata cgt gac ctg tca tat gac att gaa 240
Leu Lys Val Trp Ala Glu Gln Ile Arg Asp Leu Ser Tyr Asp Ile Glu
65 70 75 80

gat tcc ctt gat gaa ttt aag gtc cat att gaa agc caa acc cta ttt 288
Asp Ser Leu Asp Glu Phe Lys Val His Ile Glu Ser Gln Thr Leu Phe
85 90 95

cgt cag ttg gtg aaa ctc aga gaa cgc cac cga att gct atc cgt atc 336
Arg Gln Leu Val Lys Leu Arg Glu Arg His Arg Ile Ala Ile Arg Ile
100 105 110

cac aac ctt aaa tca aga gtt gaa gaa gtg agt agc agg aac aca cgc 384
His Asn Leu Lys Ser Arg Val Glu Glu Val Ser Ser Arg Asn Thr Arg
115 120 125

tac agt tta gtc aag cct att tcc tct ggc aca gag att gac atg gat 432
Tyr Ser Leu Val Lys Pro Ile Ser Ser Gly Thr Glu Ile Asp Met Asp
130 135 140

tcc tat gca gaa gac att cgt aat cag tca gct cgc aat gtg gat gag 480
Ser Tyr Ala Glu Asp Ile Arg Asn Gln Ser Ala Arg Asn Val Asp Glu
145 150 155 160

gct gag ctt gtt ggg ttt tct gac tcc aag aaa agg ctg ctt gaa atg 528
Ala Glu Leu Val Gly Phe Ser Asp Ser Lys Lys Arg Leu Leu Glu Met
165 170 175

atc gat acc aat gct aat gat ggt ccg gcc aag gta atc tgt gtt gtt 576
Ile Asp Thr Asn Ala Asn Asp Gly Pro Ala Lys Val Ile Cys Val Val
180 185 190

ggg atg ggt ggt tta ggc aag aca gct ctt tcg agg aag atc ttt gaa 624
Gly Met Gly Gly Leu Gly Lys Thr Ala Leu Ser Arg Lys Ile Phe Glu
195 200 205

agc gaa gaa gac att agg aag aac ttc cct tgc aat gct tgg att aca 672

```

Ser	Glu	Glu	Asp	Ile	Arg	Lys	Asn	Phe	Pro	Cys	Asn	Ala	Trp	Ile	Thr		
210						215					220						
gtg	tca	caa	tca	ttt	cac	agg	att	gag	cta	ctt	aaa	gat	atg	ata	cgc	720	
Val	Ser	Gln	Ser	Phe	His	Arg	Ile	Glu	Leu	Leu	Lys	Asp	Met	Ile	Arg		
225					230					235					240		
caa	ctt	ctt	ggc	ccc	agt	tct	ctg	gat	caa	ctc	ttg	caa	gaa	ttg	caa	768	
Gln	Leu	Leu	Gly	Pro	Ser	Ser	Leu	Asp	Gln	Leu	Leu	Gln	Glu	Leu	Gln		
			245						250					255			
ggg	aag	gtg	gtg	gtg	caa	gta	cat	cat	ctt	tct	gag	tac	ctg	ata	gaa	816	
Gly	Lys	Val	Val	Val	Gln	Val	His	His	Leu	Ser	Glu	Tyr	Leu	Ile	Glu		
		260					265					270					
gag	ctc	aag	gag	aag	agg	tac	ttt	gtt	gtt	cta	gat	gat	cta	tgg	att	864	
Glu	Leu	Lys	Glu	Lys	Arg	Tyr	Phe	Val	Val	Leu	Asp	Asp	Leu	Trp	Ile		
		275					280					285					
tta	cat	gat	tgg	aat	tgg	ata	aat	gaa	att	gca	ttt	cct	aag	aac	aat	912	
Leu	His	Asp	Trp	Asn	Trp	Ile	Asn	Glu	Ile	Ala	Phe	Pro	Lys	Asn	Asn		
	290					295				300							
aag	aag	ggc	agt	cga	ata	gta	ata	acc	act	cgg	aat	gtt	gat	ctt	gcg	960	
Lys	Lys	Gly	Ser	Arg	Ile	Val	Ile	Thr	Thr	Arg	Asn	Val	Asp	Leu	Ala		
305				310						315					320		
gag	aag	tgt	gcc	aca	gcc	tca	ctg	gtg	tac	cac	ctt	gat	ttc	ttg	cag	1008	
Glu	Lys	Cys	Ala	Thr	Ala	Ser	Leu	Val	Tyr	His	Leu	Asp	Phe	Leu	Gln		
			325						330					335			
atg	aac	gat	gcc	ata	aca	ttg	cta	ctg	aga	aaa	aca	aat	aaa	aat	cat	1056	
Met	Asn	Asp	Ala	Ile	Thr	Leu	Leu	Leu	Arg	Lys	Thr	Asn	Lys	Asn	His		
			340					345					350				
gaa	gac	atg	gaa	tca	aat	aaa	aat	atg	caa	aag	atg	gtt	gaa	cga	att	1104	
Glu	Asp	Met	Glu	Ser	Asn	Lys	Asn	Met	Gln	Lys	Met	Val	Glu	Arg	Ile		
		355					360					365					
gta	aat	aaa	tgt	ggt	cgt	cta	cca	tta	gca	ata	ctt	aca	ata	gga	gct	1152	
Val	Asn	Lys	Cys	Gly	Arg	Leu	Pro	Leu	Ala	Ile	Leu	Thr	Ile	Gly	Ala		
	370				375						380						
gtg	ctt	gca	act	aaa	cag	gtg	tca	gaa	tgg	gag	aaa	ttc	tat	gaa	cac	1200	
Val	Leu	Ala	Thr	Lys	Gln	Val	Ser	Glu	Trp	Glu	Lys	Phe	Tyr	Glu	His		
	385				390					395					400		
ctt	cct	tca	gaa	cta	gaa	ata	aac	cca	agc	ctg	gaa	gct	ttg	agg	aga	1248	
Leu	Pro	Ser	Glu	Leu	Glu	Ile	Asn	Pro	Ser	Leu	Glu	Ala	Leu	Arg	Arg		
			405					410						415			
atg	gtg	acc	cta	ggt	tac	aac	cac	cta	cca	tcc	cat	ttg	aaa	cca	tgc	1296	
Met	Val	Thr	Leu	Gly	Tyr	Asn	His	Leu	Pro	Ser	His	Leu	Lys	Pro	Cys		
		420					425					430					
ttt	ttg	tat	cta	agt	atc	ttt	cct	gag	gat	ttt	gaa	atc	aaa	agg	aat	1344	
Phe	Leu	Tyr	Leu	Ser	Ile	Phe	Pro	Glu	Asp	Phe	Glu	Ile	Lys	Arg	Asn		
	435					440					445						
cgt	cta	gta	ggt	aga	tgg	ata	gca	gaa	ggg	ttt	gtt	aga	cca	aag	gtt	1392	
Arg	Leu	Val	Gly	Arg	Trp	Ile	Ala	Glu	Gly	Phe	Val	Arg	Pro	Lys	Val		
	450					455					460						

ggg atg acg act aag gat gtc gga gaa agt tac ttt aat gag cta atc	1440
Gly Met Thr Thr Lys Asp Val Gly Glu Ser Tyr Phe Asn Glu Leu Ile	
465 470 475 480	
aac cga agt atg att caa cga tca aga gtg ggc ata gca gga aaa att	1488
Asn Arg Ser Met Ile Gln Arg Ser Arg Val Gly Ile Ala Gly Lys Ile	
485 490 495	
aag act tgt cga att cat gat atc atc cgt gat atc aca gtt tca atc	1536
Lys Thr Cys Arg Ile His Asp Ile Ile Arg Asp Ile Thr Val Ser Ile	
500 505 510	
tcg aga cag gaa aat ttt gta tta tta cca atg gga gat ggc tct gat	1584
Ser Arg Gln Glu Asn Phe Val Leu Leu Pro Met Gly Asp Gly Ser Asp	
515 520 525	
tta gtt cag gaa aac act cgc cac ata gca ttc cat ggg agt atg tcc	1632
Leu Val Gln Glu Asn Thr Arg His Ile Ala Phe His Gly Ser Met Ser	
530 535 540	
tgc aaa act gga ttg gat tgg agc att att cga tca tta gct att ttt	1680
Cys Lys Thr Gly Leu Asp Trp Ser Ile Ile Arg Ser Leu Ala Ile Phe	
545 550 555 560	
ggg gac aga ccc aag agt cta gca cat gca gtt tgt cca gat caa ttg	1728
Gly Asp Arg Pro Lys Ser Leu Ala His Ala Val Cys Pro Asp Gln Leu	
565 570 575	
agg atg tta cgg gtc ttg gat ctt gaa gat gtg aca ttc tta atc act	1776
Arg Met Leu Arg Val Leu Asp Leu Glu Asp Val Thr Phe Leu Ile Thr	
580 585 590	
caa aaa gat ttc gac cgt att gca ttg ttg tgc cac ttg aaa tac ttg	1824
Gln Lys Asp Phe Asp Arg Ile Ala Leu Leu Cys His Leu Lys Tyr Leu	
595 600 605	
agt att gga tat tcg tca tcc ata tat tca ctt ccc aga tcc att ggt	1872
Ser Ile Gly Tyr Ser Ser Ser Ile Tyr Ser Leu Pro Arg Ser Ile Gly	
610 615 620	
aaa cta cag ggc cta caa act ttg aac atg ccg agc aca tac att gca	1920
Lys Leu Gln Gly Leu Gln Thr Leu Asn Met Pro Ser Thr Tyr Ile Ala	
625 630 635 640	
gca cta cca agt gag atc agt aaa ctc caa tgt ctg cat act ctt cgt	1968
Ala Leu Pro Ser Glu Ile Ser Lys Leu Gln Cys Leu His Thr Leu Arg	
645 650 655	
tgt ata gga cag ttt cat tat gac aac ttt agt cta aac cac cca atg	2016
Cys Ile Gly Gln Phe His Tyr Asp Asn Phe Ser Leu Asn His Pro Met	
660 665 670	
aag tgc ata act aac aca ata tgc ctg cct aaa gta ttc aca cct tta	2064
Lys Cys Ile Thr Asn Thr Ile Cys Leu Pro Lys Val Phe Thr Pro Leu	
675 680 685	
gtt agt cgc gat gat cgt gca aaa caa att gct gaa ttg cac atg gcc	2112
Val Ser Arg Asp Asp Arg Ala Lys Gln Ile Ala Glu Leu His Met Ala	
690 695 700	
acc aaa agt tgc tgg tct gaa tca atc ggt gtg aag gta ccc aaa gga	2160
Thr Lys Ser Cys Trp Ser Glu Ser Ile Gly Val Lys Val Pro Lys Gly	
705 710 715 720	

ata ggt aag ttg cga gac ttg cag gtt cta gag tat gta gat atc agg Ile Gly Lys Leu Arg Asp Leu Gln Val Leu Glu Tyr Val Asp Ile Arg 725 730 735	2208
cgg acc agt agt aga gca atc aaa gag ctg ggg cag tta agc aag ctg Arg Thr Ser Ser Arg Ala Ile Lys Glu Leu Gly Gln Leu Ser Lys Leu 740 745 750	2256
agg aaa tta ggt gtg aca aca aac ggg tcg aca aag gaa aaa tgt aag Arg Lys Leu Gly Val Thr Thr Asn Gly Ser Thr Lys Glu Lys Cys Lys 755 760 765	2304
ata ctt tat gca gcc att gag aag ctc tct tcc ctc caa tct ctc cat Ile Leu Tyr Ala Ala Ile Glu Lys Leu Ser Ser Leu Gln Ser Leu His 770 775 780	2352
gtg gat gct gca gga atc tca gat ggt gga aca ctt gag tgc cta gat Val Asp Ala Ala Gly Ile Ser Asp Gly Gly Thr Leu Glu Cys Leu Asp 785 790 795 800	2400
tct att tca tct cct cct ccc cta ctg agg aca ctc gtg ttg gat gga Ser Ile Ser Ser Pro Pro Pro Leu Leu Arg Thr Leu Val Leu Asp Gly 805 810 815	2448
att ctt gag gag atg cct aac tgg att gag cag ctc act cac ctg aag Ile Leu Glu Glu Met Pro Asn Trp Ile Glu Gln Leu Thr His Leu Lys 820 825 830	2496
aag atc tac tta ttg agg agc aaa cta aag gaa ggt aaa acc atg ctg Lys Ile Tyr Leu Leu Arg Ser Lys Leu Lys Glu Gly Lys Thr Met Leu 835 840 845	2544
ata ctt ggg gca ctg ccc aac ctc atg gtc ctt cat ctt tat cgg aat Ile Leu Gly Ala Leu Pro Asn Leu Met Val Leu His Leu Tyr Arg Asn 850 855 860	2592
gct tac ctt ggg gag aag cta gta ttc aaa aca gga gca ttc cca aat Ala Tyr Leu Gly Glu Lys Leu Val Phe Lys Thr Gly Ala Phe Pro Asn 865 870 875 880	2640
ctt aga aca ctt tgg att tat gaa ttg gat cag cta aga gag atc aga Leu Arg Thr Leu Trp Ile Tyr Glu Leu Asp Gln Leu Arg Glu Ile Arg 885 890 895	2688
ttt gag gac ggc agc tca ccc ctg ttg gaa aag ata gaa ata ggc gag Phe Glu Asp Gly Ser Ser Pro Leu Leu Glu Lys Ile Glu Ile Gly Glu 900 905 910	2736
tgc agg ttg gaa tct ggg att act ggt atc att cac ctt cca aag ctc Cys Arg Leu Glu Ser Gly Ile Thr Gly Ile Ile His Leu Pro Lys Leu 915 920 925	2784
aag gag att cca att aga tac gga agt aaa gtg gct ggg ctt ggt cag Lys Glu Ile Pro Ile Arg Tyr Gly Ser Lys Val Ala Gly Leu Gly Gln 930 935 940	2832
ctg gag gga gaa gtg aac gca cac cca aat cgc ccc gtg ctg cta atg Leu Glu Gly Glu Val Asn Ala His Pro Asn Arg Pro Val Leu Leu Met 945 950 955 960	2880
tac agt gac cga agg tat cac gac ctg ggg gct gaa gcc gaa gga tct Tyr Ser Asp Arg Arg Tyr His Asp Leu Gly Ala Glu Ala Glu Gly Ser	2928

965					970					975						
tct	ata	gaa	gtg	caa	aca	gca	gat	cct	gtt	cct	gat	gcc	gaa	gga	tca	2976
Ser	Ile	Glu	Val	Gln	Thr	Ala	Asp	Pro	Val	Pro	Asp	Ala	Glu	Gly	Ser	
			980					985					990			
gtc	act	gta	gca	gtg	gaa	gca	acg	gat	ccc	ctt	ccc	gag	cag	gag	gga	3024
Val	Thr	Val	Ala	Val	Glu	Ala	Thr	Asp	Pro	Leu	Pro	Glu	Gln	Glu	Gly	
			995				1000					1005				
gag	agc	tcg	cag	tcg	cag	gtg	atc	acg	ttg	acg	acg	aat	gat	agc	gaa	3072
Glu	Ser	Ser	Gln	Ser	Gln	Val	Ile	Thr	Leu	Thr	Thr	Asn	Asp	Ser	Glu	
		1010				1015					1020					
gag	ata	ggc	aca	gct	caa	gct	ggc	tga								3099
Glu	Ile	Gly	Thr	Ala	Gln	Ala	Gly	*								
1025					1030											

<210> 8  
 <211> 1032  
 <212> PRT  
 <213> Oryza minuta

<400> 8

Met	Ala	Glu	Thr	Val	Leu	Ser	Met	Ala	Arg	Ser	Leu	Val	Gly	Ser	Ala	
1				5					10					15		
Ile	Ser	Lys	Ala	Ala	Ser	Ala	Ala	Ala	Asp	Glu	Thr	Ser	Leu	Leu	Leu	
			20					25					30			
Gly	Val	Glu	Lys	Asp	Ile	Trp	Tyr	Ile	Lys	Asp	Glu	Leu	Lys	Thr	Met	
		35					40					45				
Gln	Ala	Phe	Leu	Arg	Ala	Ala	Glu	Leu	Met	Lys	Lys	Lys	Asp	Glu	Leu	
	50					55					60					
Leu	Lys	Val	Trp	Ala	Glu	Gln	Ile	Arg	Asp	Leu	Ser	Tyr	Asp	Ile	Glu	
65					70					75				80		
Asp	Ser	Leu	Asp	Glu	Phe	Lys	Val	His	Ile	Glu	Ser	Gln	Thr	Leu	Phe	
			85					90					95			
Arg	Gln	Leu	Val	Lys	Leu	Arg	Glu	Arg	His	Arg	Ile	Ala	Ile	Arg	Ile	
			100					105					110			
His	Asn	Leu	Lys	Ser	Arg	Val	Glu	Glu	Val	Ser	Ser	Arg	Asn	Thr	Arg	
		115					120					125				
Tyr	Ser	Leu	Val	Lys	Pro	Ile	Ser	Ser	Gly	Thr	Glu	Ile	Asp	Met	Asp	
	130					135					140					
Ser	Tyr	Ala	Glu	Asp	Ile	Arg	Asn	Gln	Ser	Ala	Arg	Asn	Val	Asp	Glu	
145					150					155				160		
Ala	Glu	Leu	Val	Gly	Phe	Ser	Asp	Ser	Lys	Lys	Arg	Leu	Leu	Glu	Met	
			165						170					175		
Ile	Asp	Thr	Asn	Ala	Asn	Asp	Gly	Pro	Ala	Lys	Val	Ile	Cys	Val	Val	
		180						185					190			
Gly	Met	Gly	Gly	Leu	Gly	Lys	Thr	Ala	Leu	Ser	Arg	Lys	Ile	Phe	Glu	
		195					200					205				
Ser	Glu	Glu	Asp	Ile	Arg	Lys	Asn	Phe	Pro	Cys	Asn	Ala	Trp	Ile	Thr	
	210					215					220					
Val	Ser	Gln	Ser	Phe	His	Arg	Ile	Glu	Leu	Leu	Lys	Asp	Met	Ile	Arg	
225				230						235				240		
Gln	Leu	Leu	Gly	Pro	Ser	Ser	Leu	Asp	Gln	Leu	Leu	Gln	Glu	Leu	Gln	
			245						250				255			
Gly	Lys	Val	Val	Val	Gln	Val	His	His	Leu	Ser	Glu	Tyr	Leu	Ile	Glu	
		260					265						270			
Glu	Leu	Lys	Glu	Lys	Arg	Tyr	Phe	Val	Val	Leu	Asp	Asp	Leu	Trp	Ile	
		275					280					285				
Leu	His	Asp	Trp	Asn	Trp	Ile	Asn	Glu	Ile	Ala	Phe	Pro	Lys	Asn	Asn	
	290					295					300					

Lys	Lys	Gly	Ser	Arg	Ile	Val	Ile	Thr	Thr	Arg	Asn	Val	Asp	Leu	Ala
305					310					315					320
Glu	Lys	Cys	Ala	Thr	Ala	Ser	Leu	Val	Tyr	His	Leu	Asp	Phe	Leu	Gln
				325					330						335
Met	Asn	Asp	Ala	Ile	Thr	Leu	Leu	Leu	Arg	Lys	Thr	Asn	Lys	Asn	His
			340					345					350		
Glu	Asp	Met	Glu	Ser	Asn	Lys	Asn	Met	Gln	Lys	Met	Val	Glu	Arg	Ile
		355					360					365			
Val	Asn	Lys	Cys	Gly	Arg	Leu	Pro	Leu	Ala	Ile	Leu	Thr	Ile	Gly	Ala
	370					375					380				
Val	Leu	Ala	Thr	Lys	Gln	Val	Ser	Glu	Trp	Glu	Lys	Phe	Tyr	Glu	His
385					390					395					400
Leu	Pro	Ser	Glu	Leu	Glu	Ile	Asn	Pro	Ser	Leu	Glu	Ala	Leu	Arg	Arg
			405					410						415	
Met	Val	Thr	Leu	Gly	Tyr	Asn	His	Leu	Pro	Ser	His	Leu	Lys	Pro	Cys
			420					425					430		
Phe	Leu	Tyr	Leu	Ser	Ile	Phe	Pro	Glu	Asp	Phe	Glu	Ile	Lys	Arg	Asn
	435						440					445			
Arg	Leu	Val	Gly	Arg	Trp	Ile	Ala	Glu	Gly	Phe	Val	Arg	Pro	Lys	Val
	450					455					460				
Gly	Met	Thr	Thr	Lys	Asp	Val	Gly	Glu	Ser	Tyr	Phe	Asn	Glu	Leu	Ile
465					470					475					480
Asn	Arg	Ser	Met	Ile	Gln	Arg	Ser	Arg	Val	Gly	Ile	Ala	Gly	Lys	Ile
			485					490					495		
Lys	Thr	Cys	Arg	Ile	His	Asp	Ile	Ile	Arg	Asp	Ile	Thr	Val	Ser	Ile
			500					505					510		
Ser	Arg	Gln	Glu	Asn	Phe	Val	Leu	Leu	Pro	Met	Gly	Asp	Gly	Ser	Asp
		515					520					525			
Leu	Val	Gln	Glu	Asn	Thr	Arg	His	Ile	Ala	Phe	His	Gly	Ser	Met	Ser
	530					535					540				
Cys	Lys	Thr	Gly	Leu	Asp	Trp	Ser	Ile	Ile	Arg	Ser	Leu	Ala	Ile	Phe
545					550					555					560
Gly	Asp	Arg	Pro	Lys	Ser	Leu	Ala	His	Ala	Val	Cys	Pro	Asp	Gln	Leu
			565					570					575		
Arg	Met	Leu	Arg	Val	Leu	Asp	Leu	Glu	Asp	Val	Thr	Phe	Leu	Ile	Thr
		580					585						590		
Gln	Lys	Asp	Phe	Asp	Arg	Ile	Ala	Leu	Leu	Cys	His	Leu	Lys	Tyr	Leu
		595					600					605			
Ser	Ile	Gly	Tyr	Ser	Ser	Ser	Ile	Tyr	Ser	Leu	Pro	Arg	Ser	Ile	Gly
	610					615					620				
Lys	Leu	Gln	Gly	Leu	Gln	Thr	Leu	Asn	Met	Pro	Ser	Thr	Tyr	Ile	Ala
625					630					635					640
Ala	Leu	Pro	Ser	Glu	Ile	Ser	Lys	Leu	Gln	Cys	Leu	His	Thr	Leu	Arg
			645					650					655		
Cys	Ile	Gly	Gln	Phe	His	Tyr	Asp	Asn	Phe	Ser	Leu	Asn	His	Pro	Met
		660					665					670			
Lys	Cys	Ile	Thr	Asn	Thr	Ile	Cys	Leu	Pro	Lys	Val	Phe	Thr	Pro	Leu
		675					680					685			
Val	Ser	Arg	Asp	Asp	Arg	Ala	Lys	Gln	Ile	Ala	Glu	Leu	His	Met	Ala
	690					695					700				
Thr	Lys	Ser	Cys	Trp	Ser	Glu	Ser	Ile	Gly	Val	Lys	Val	Pro	Lys	Gly
705					710				715						720
Ile	Gly	Lys	Leu	Arg	Asp	Leu	Gln	Val	Leu	Glu	Tyr	Val	Asp	Ile	Arg
			725					730					735		
Arg	Thr	Ser	Ser	Arg	Ala	Ile	Lys	Glu	Leu	Gly	Gln	Leu	Ser	Lys	Leu
		740					745					750			
Arg	Lys	Leu	Gly	Val	Thr	Thr	Asn	Gly	Ser	Thr	Lys	Glu	Lys	Cys	Lys
		755					760					765			
Ile	Leu	Tyr	Ala	Ala	Ile	Glu	Lys	Leu	Ser	Ser	Leu	Gln	Ser	Leu	His
	770					775					780				
Val	Asp	Ala	Ala	Gly	Ile	Ser	Asp	Gly	Gly	Thr	Leu	Glu	Cys	Leu	Asp
785					790				795						800
Ser	Ile	Ser	Ser	Pro	Pro	Pro	Leu	Leu	Arg	Thr	Leu	Val	Leu	Asp	Gly





```

attacaagag ttacacactg gacatatctg acacttatat tacaatgcta ccaaatgaga 621
ttagtaaaatt gcagtctatg tgctctccgt ggtagaagac aaggatccta ctatgacctt 681
gatacatata atcgtaagga atgtgtactt attttatcac gtattccttt gattatggct 741
ttaagtgatt ctgataacca tagaagacta attaccgatc tacacacggg ttgttcaagt 801
cattggcata taattaaaga tggtgcaagg gtaccaagtg gaatcaagaa tttgaagaga 861
ttgaaagtac tagagatagt ggatatcgcg gtaactgaca gcagagcaat tcaagagttg 921
ggggaactta accagctaag aaaactaagt gtcatgacaa aagggtcgaa caagaaaaag 981
tgcaaaatac tttgtgcagc catcgaaaag ctacttcct tcaaatctct ctatgtggat 1041
ggtcatggat actcacttga tggaaacttt gagtggcttg attctatttc ccatcctcct 1101
tcctcaaga gccttagatt gaaggggtgt attaaggaga cacccaactg gtttagggag 1161
ctcaaacact tgggtgaagat ttacttatat aaaagtcgcc taaatggaga taccatggag 1221
atactcgggg aactacataa tctcatggat cttcactttc gttggtatgc atacgttggg 1281
gagaagctag tgttcattga gggagcattc caaatctcc ggaagcttgt tgttgaaact 1341
gaggataaac taagagaggt gaggtttgag gagggcacct caccacag 1389

```

<210> 10  
 <211> 49  
 <212> PRT  
 <213> Oryza minuta

```

<400> 10
Met Asp Trp Ser His Val Arg Ser Leu Thr Leu Phe Gly Asp Glu Arg
 1             5             10            15
Pro Lys Glu Leu Ser Pro Pro Phe Cys Ser Pro Gln Leu Lys Met Leu
      20             25            30
Arg Val Leu Asp Leu Leu Asp Ile Ile Phe Gly Leu Ala Lys Arg Tyr
      35             40            45
Gly

```

<210> 11  
 <211> 2997  
 <212> DNA  
 <213> Oryza minuta

<220>  
 <221> CDS  
 <222> (1)...(2997)

```

<400> 11
atg gcg gag acg gtg ctg agc atg gcg agg tcg ctg gtg ggg agc gcc 48
Met Ala Glu Thr Val Leu Ser Met Ala Arg Ser Leu Val Gly Ser Ala
 1             5             10            15

atc agc aag gcc gcc tcc gcc gct gcc gac gag acc agc ctc ctg ctc 96
Ile Ser Lys Ala Ala Ser Ala Ala Ala Asp Glu Thr Ser Leu Leu Leu
      20             25            30

ggc gtc gag aaa gac atc tgg tac ttg ttt aga cat ggt gtt gga cgg 144
Gly Val Glu Lys Asp Ile Trp Tyr Leu Phe Arg His Gly Val Gly Arg
      35             40            45

tcg aat ggt ggg cct gtt gta ggt atg gtg gca tct ggc aac cag tca 192
Ser Asn Gly Gly Pro Val Val Gly Met Val Ala Ser Gly Asn Gln Ser
      50             55            60

tgc tta gca ata gat tcc tat gca gaa gac att cgc aat caa tca gct 240
Cys Leu Ala Ile Asp Ser Tyr Ala Glu Asp Ile Arg Asn Gln Ser Ala
      65             70            75            80

cga aat gtg gat gaa gct gag ctt gtt ggg ttt tct gac tcc aag aaa 288
Arg Asn Val Asp Glu Ala Glu Leu Val Gly Phe Ser Asp Ser Lys Lys

```

85										90										95										
agg	ctg	ctt	gaa	atg	atc	gat	acc	aat	gct	aat	gat	ggg	ccg	gcc	aag	336														
Arg	Leu	Leu	Glu	Met	Ile	Asp	Thr	Asn	Ala	Asn	Asp	Gly	Pro	Ala	Lys															
			100						105			110																		
gta	atc	tgt	gtt	gtt	ggg	atg	ggg	ggg	tta	ggc	aag	aca	gct	ctt	tcg	384														
Val	Ile	Cys	Val	Val	Gly	Met	Gly	Gly	Leu	Gly	Lys	Thr	Ala	Leu	Ser															
			115						120			125																		
agg	aag	atc	ttt	gaa	agc	gaa	gaa	gac	att	agg	aag	aac	ttc	cct	tgc	432														
Arg	Lys	Ile	Phe	Glu	Ser	Glu	Glu	Asp	Ile	Arg	Lys	Asn	Phe	Pro	Cys															
			130						135			140																		
aat	gct	tgg	att	aca	gtg	tca	caa	tca	ttt	cac	agg	att	gag	cta	ctt	480														
Asn	Ala	Trp	Ile	Thr	Val	Ser	Gln	Ser	Phe	His	Arg	Ile	Glu	Leu	Leu															
			145						150			155			160															
aaa	gat	atg	ata	cgc	caa	ctt	ctt	ggc	ccc	agt	tct	ctg	gat	caa	ctc	528														
Lys	Asp	Met	Ile	Arg	Gln	Leu	Leu	Gly	Pro	Ser	Ser	Leu	Asp	Gln	Leu															
			165						170			175																		
ttg	caa	gaa	ttg	caa	ggg	aag	gtg	gtg	gtg	caa	gta	cat	cat	ctt	tct	576														
Leu	Gln	Glu	Leu	Gln	Gly	Lys	Val	Val	Val	Gln	Val	His	His	Leu	Ser															
			180						185			190																		
gag	tac	ctg	ata	gaa	gag	ctc	aag	gag	aag	agg	tac	ttt	gtt	gtt	cta	624														
Glu	Tyr	Leu	Ile	Glu	Glu	Leu	Lys	Glu	Lys	Arg	Tyr	Phe	Val	Val	Leu															
			195						200			205																		
gat	gat	cta	tgg	att	tta	cat	gat	tgg	aat	tgg	ata	aat	gaa	att	gca	672														
Asp	Asp	Leu	Trp	Ile	Leu	His	Asp	Trp	Asn	Trp	Ile	Asn	Glu	Ile	Ala															
			210						215			220																		
ttt	cct	aag	aac	aat	aag	aag	ggc	agt	caa	ata	gta	ata	acc	act	tgg	720														
Phe	Pro	Lys	Asn	Asn	Lys	Lys	Gly	Ser	Gln	Ile	Val	Ile	Thr	Thr	Trp															
			225						230			235			240															
aat	gtt	gat	ctt	gcg	gag	aag	tgt	gcc	aca	gcc	tca	ctg	gtg	tac	cac	768														
Asn	Val	Asp	Leu	Ala	Glu	Lys	Cys	Ala	Thr	Ala	Ser	Leu	Val	Tyr	His															
			245						250			255																		
ctt	gat	ttc	ttg	cag	atg	aac	gat	gcc	ata	aca	ttg	cta	ctg	aga	aaa	816														
Leu	Asp	Phe	Leu	Gln	Met	Asn	Asp	Ala	Ile	Thr	Leu	Leu	Leu	Arg	Lys															
			260						265			270																		
aca	aat	aaa	aat	cat	gaa	gac	atg	gaa	tca	aat	aaa	aat	atg	caa	aag	864														
Thr	Asn	Lys	Asn	His	Glu	Asp	Met	Glu	Ser	Asn	Lys	Asn	Met	Gln	Lys															
			275						280			285																		
atg	gtt	gaa	cga	att	gta	aat	aaa	tgt	ggg	cgt	cta	cca	tta	gca	ata	912														
Met	Val	Glu	Arg	Ile	Val	Asn	Lys	Cys	Gly	Arg	Leu	Pro	Leu	Ala	Ile															
			290						295			300																		
ctt	aca	ata	gga	gct	gtg	ctt	gca	act	aaa	cag	gtg	tca	gaa	tgg	gag	960														
Leu	Thr	Ile	Gly	Ala	Val	Leu	Ala	Thr	Lys	Gln	Val	Ser	Glu	Trp	Glu															
			305						310			315			320															
aaa	ttc	tat	gaa	cac	ctt	cct	tca	gaa	cta	gaa	ata	aac	cca	agc	ctg	1008														
Lys	Phe	Tyr	Glu	His	Leu	Pro	Ser	Glu	Leu	Glu	Ile	Asn	Pro	Ser	Leu															
			325						330			335																		
gaa	gct	ttg	agg	aga	atg	gtg	acc	cta	ggg	tac	aac	cac	cta	cca	tcc	1056														

Glu Ala Leu Arg Arg Met Val Thr Leu Gly Tyr Asn His Leu Pro Ser	
340 345 350	
cat ctg aaa cca tgc ttt ttg tat cta agt atc ttt cct gag gat ttt	1104
His Leu Lys Pro Cys Phe Leu Tyr Leu Ser Ile Phe Pro Glu Asp Phe	
355 360 365	
gaa atc aaa agg aat cgt cta gta ggt aga tgg ata gca gaa ggg ttt	1152
Glu Ile Lys Arg Asn Arg Leu Val Gly Arg Trp Ile Ala Glu Gly Phe	
370 375 380	
gtt aga cca aag gtt ggg atg acg act aag gat gtc gga gaa agt tac	1200
Val Arg Pro Lys Val Gly Met Thr Thr Lys Asp Val Gly Glu Ser Tyr	
385 390 395 400	
ttt aat gag cta atc aac cga agt atg att caa cga tca aga gtg ggc	1248
Phe Asn Glu Leu Ile Asn Arg Ser Met Ile Gln Arg Ser Arg Val Gly	
405 410 415	
ata gca gga aaa att aag act tgt cga att cat gat atc atc cgt gat	1296
Ile Ala Gly Lys Ile Lys Thr Cys Arg Ile His Asp Ile Ile Arg Asp	
420 425 430	
atc aca gtt tca atc tcg aga cag gaa aat ttt gta ttg tta cca atg	1344
Ile Thr Val Ser Ile Ser Arg Gln Glu Asn Phe Val Leu Leu Pro Met	
435 440 445	
gga gat ggc tct gat tta gtt cag gaa aac act cgc cac ata gca ttc	1392
Gly Asp Gly Ser Asp Leu Val Gln Glu Asn Thr Arg His Ile Ala Phe	
450 455 460	
cat ggg agt atg tcc tgc aaa aca gga ttg gat tgg agc att att cga	1440
His Gly Ser Met Ser Cys Lys Thr Gly Leu Asp Trp Ser Ile Ile Arg	
465 470 475 480	
tca tta gct att ttt ggt gac aga ccc aag agt cta gca cat gca gtt	1488
Ser Leu Ala Ile Phe Gly Asp Arg Pro Lys Ser Leu Ala His Ala Val	
485 490 495	
tgt cca gat caa ttg agg atg tta cgg gtc ttg gat ctt gaa gat gtg	1536
Cys Pro Asp Gln Leu Arg Met Leu Arg Val Leu Asp Leu Glu Asp Val	
500 505 510	
aca ttc tta atc act caa aaa gat ttc gac cgt att gca ttg ttg tgc	1584
Thr Phe Leu Ile Thr Gln Lys Asp Phe Asp Arg Ile Ala Leu Leu Cys	
515 520 525	
cac ttg aaa tac ttg agt att gga tat tcg tca tcc ata tat tca ctt	1632
His Leu Lys Tyr Leu Ser Ile Gly Tyr Ser Ser Ile Tyr Ser Leu	
530 535 540	
ccc aga tcc att ggt aaa cta cag ggc cta caa act ttg aac atg ccg	1680
Pro Arg Ser Ile Gly Lys Leu Gln Gly Leu Gln Thr Leu Asn Met Pro	
545 550 555 560	
agc aca tac att gca gca cta cca agt gag atc agt aaa ctc caa tgt	1728
Ser Thr Tyr Ile Ala Ala Leu Pro Ser Glu Ile Ser Lys Leu Gln Cys	
565 570 575	
ctg cat act ctt cgt tgt agt aga aag ttt gtt tct gac aac ttt agt	1776
Leu His Thr Leu Arg Cys Ser Arg Lys Phe Val Ser Asp Asn Phe Ser	
580 585 590	

cta aac cac cca atg aag tgc ata act aac aca ata tgc ctg cct aaa	1824
Leu Asn His Pro Met Lys Cys Ile Thr Asn Thr Ile Cys Leu Pro Lys	
595 600 605	
gta ttc aca cct tta gtt agt cgc gat gat cgt gca ata caa att gct	1872
Val Phe Thr Pro Leu Val Ser Arg Asp Asp Arg Ala Ile Gln Ile Ala	
610 615 620	
gaa ttg cac atg gcc acc aaa agt tgc tgg tat aaa tca ttc ggt gtg	1920
Glu Leu His Met Ala Thr Lys Ser Cys Trp Tyr Lys Ser Phe Gly Val	
625 630 635 640	
aag gta ccc aaa gga ata ggt aag ttg cga gac tta cag gtt cta gag	1968
Lys Val Pro Lys Gly Ile Gly Lys Leu Arg Asp Leu Gln Val Leu Glu	
645 650 655	
tat gta gat atc agg cgg acc agt agt aga gca atc aaa gag ctg ggg	2016
Tyr Val Asp Ile Arg Arg Thr Ser Ser Arg Ala Ile Lys Glu Leu Gly	
660 665 670	
cag tta agc aag ctg agg aaa tta ggt gtg atg aca aat ggc tcg aca	2064
Gln Leu Ser Lys Leu Arg Lys Leu Gly Val Met Thr Asn Gly Ser Thr	
675 680 685	
aag gaa aaa tgt aag ata ctt tgt gca gcc att gag aag ctc tct tcc	2112
Lys Glu Lys Cys Lys Ile Leu Cys Ala Ala Ile Glu Lys Leu Ser Ser	
690 695 700	
ctc caa tat ctc tat gtg aat gct gca gga atc tca gat ggt gga aca	2160
Leu Gln Tyr Leu Tyr Val Asn Ala Ala Gly Ile Ser Asp Gly Gly Thr	
705 710 715 720	
ctt gag tgc cta gat tct att tcc tct cct cct ccc cta ctg agg aca	2208
Leu Glu Cys Leu Asp Ser Ile Ser Ser Pro Pro Pro Leu Leu Arg Thr	
725 730 735	
ctc gtg ttg tat gga agt ctt gaa gag atg cct aac tgg att gag cag	2256
Leu Val Leu Tyr Gly Ser Leu Glu Glu Met Pro Asn Trp Ile Glu Gln	
740 745 750	
ctc act cac ctg aag aag atc tac tta ttg agg agc aaa cta aag gaa	2304
Leu Thr His Leu Lys Lys Ile Tyr Leu Leu Arg Ser Lys Leu Lys Glu	
755 760 765	
ggg aaa acc atg ctg ata ctt ggg gca ttg ccc aac ctc atg gtc ctt	2352
Gly Lys Thr Met Leu Ile Leu Gly Ala Leu Pro Asn Leu Met Val Leu	
770 775 780	
gat ctt tat cgg aaa gct tac ctt ggg gag aag cta gta ttc aaa aca	2400
Asp Leu Tyr Arg Lys Ala Tyr Leu Gly Glu Lys Leu Val Phe Lys Thr	
785 790 795 800	
gga gca ttc cca aat ctt aga aca ctt tcg att tac gat ttg gat cag	2448
Gly Ala Phe Pro Asn Leu Arg Thr Leu Ser Ile Tyr Asp Leu Asp Gln	
805 810 815	
cta aga gag att aga ttt gag gac ggc agc tcg ccc cag ttg gaa aag	2496
Leu Arg Glu Ile Arg Phe Glu Asp Gly Ser Ser Pro Gln Leu Glu Lys	
820 825 830	
ata gaa atc aga ttc tgc agg ttg gaa tca ggg att att ggt att atc	2544
Ile Glu Ile Arg Phe Cys Arg Leu Glu Ser Gly Ile Ile Gly Ile Ile	
835 840 845	

cac ctt cca agg ctc aag gag att tca ctt gga tac gaa agt aaa gtg	2592
His Leu Pro Arg Leu Lys Glu Ile Ser Leu Gly Tyr Glu Ser Lys Val	
850 855 860	
gct ggg ctt gct cag ctg gag gga gaa gtg cgc aca cac cca aat cac	2640
Ala Gly Leu Ala Gln Leu Glu Gly Glu Val Arg Thr His Pro Asn His	
865 870 875 880	
ccc gtg ctg cga aag agg gag gac cga agt gat cac gac ctt gct tgt	2688
Pro Val Leu Arg Lys Arg Glu Asp Arg Ser Asp His Asp Leu Ala Cys	
885 890 895	
gac gcc gaa gga tcc cct gtt gaa gtg gaa gca acg gat ccc ctc cca	2736
Asp Ala Glu Gly Ser Pro Val Glu Val Glu Ala Thr Asp Pro Leu Pro	
900 905 910	
gag cag gag gga gag agc tcg cag cga aga gat aag cac agc tca agc	2784
Glu Gln Glu Gly Glu Ser Ser Gln Arg Arg Asp Lys His Ser Ser Ser	
915 920 925	
tgg ttt tat caa gtg atg atc tcc tcc tcc att ggc atc tcc ggt cgt	2832
Trp Phe Tyr Gln Val Met Ile Ser Ser Ser Ile Gly Ile Ser Gly Arg	
930 935 940	
ccc tgc ttc tgc ggc tgc gca cac ctc gct gtt ccg agg agg ggt gct	2880
Pro Cys Phe Cys Gly Cys Ala His Leu Ala Val Pro Arg Arg Gly Ala	
945 950 955 960	
gat cta agg agg ctt cca ctt tct tca att gcg tct cac gct ctc gat	2928
Asp Leu Arg Arg Leu Pro Leu Ser Ser Ile Ala Ser His Ala Leu Asp	
965 970 975	
tct tcc ctc tcg ggt atg aat tgt ttc aat ctg acc ttt tct cgt gat	2976
Ser Ser Leu Ser Gly Met Asn Cys Phe Asn Leu Thr Phe Ser Arg Asp	
980 985 990	
atg cta ctg gtt cca gca tga	2997
Met Leu Leu Val Pro Ala *	
995	

<210> 12  
 <211> 998  
 <212> PRT  
 <213> Oryza minuta

<400> 12  
 Met Ala Glu Thr Val Leu Ser Met Ala Arg Ser Leu Val Gly Ser Ala  
 1 5 10 15  
 Ile Ser Lys Ala Ala Ser Ala Ala Ala Asp Glu Thr Ser Leu Leu Leu  
 20 25 30  
 Gly Val Glu Lys Asp Ile Trp Tyr Leu Phe Arg His Gly Val Gly Arg  
 35 40 45  
 Ser Asn Gly Gly Pro Val Val Gly Met Val Ala Ser Gly Asn Gln Ser  
 50 55 60  
 Cys Leu Ala Ile Asp Ser Tyr Ala Glu Asp Ile Arg Asn Gln Ser Ala  
 65 70 75 80  
 Arg Asn Val Asp Glu Ala Glu Leu Val Gly Phe Ser Asp Ser Lys Lys  
 85 90 95  
 Arg Leu Leu Glu Met Ile Asp Thr Asn Ala Asn Asp Gly Pro Ala Lys  
 100 105 110  
 Val Ile Cys Val Val Gly Met Gly Gly Leu Gly Lys Thr Ala Leu Ser



Glu Leu His Met Ala Thr Lys Ser Cys Trp Tyr Lys Ser Phe Gly Val  
 625 630 635 640  
 Lys Val Pro Lys Gly Ile Gly Lys Leu Arg Asp Leu Gln Val Leu Glu  
 645 650 655  
 Tyr Val Asp Ile Arg Arg Thr Ser Ser Arg Ala Ile Lys Glu Leu Gly  
 660 665 670  
 Gln Leu Ser Lys Leu Arg Lys Leu Gly Val Met Thr Asn Gly Ser Thr  
 675 680 685  
 Lys Glu Lys Cys Lys Ile Leu Cys Ala Ala Ile Glu Lys Leu Ser Ser  
 690 695 700  
 Leu Gln Tyr Leu Tyr Val Asn Ala Ala Gly Ile Ser Asp Gly Gly Thr  
 705 710 715 720  
 Leu Glu Cys Leu Asp Ser Ile Ser Ser Pro Pro Pro Leu Leu Arg Thr  
 725 730 735  
 Leu Val Leu Tyr Gly Ser Leu Glu Glu Met Pro Asn Trp Ile Glu Gln  
 740 745 750  
 Leu Thr His Leu Lys Lys Ile Tyr Leu Leu Arg Ser Lys Leu Lys Glu  
 755 760 765  
 Gly Lys Thr Met Leu Ile Leu Gly Ala Leu Pro Asn Leu Met Val Leu  
 770 775 780  
 Asp Leu Tyr Arg Lys Ala Tyr Leu Gly Glu Lys Leu Val Phe Lys Thr  
 785 790 795 800  
 Gly Ala Phe Pro Asn Leu Arg Thr Leu Ser Ile Tyr Asp Leu Asp Gln  
 805 810 815  
 Leu Arg Glu Ile Arg Phe Glu Asp Gly Ser Ser Pro Gln Leu Glu Lys  
 820 825 830  
 Ile Glu Ile Arg Phe Cys Arg Leu Glu Ser Gly Ile Ile Gly Ile Ile  
 835 840 845  
 His Leu Pro Arg Leu Lys Glu Ile Ser Leu Gly Tyr Glu Ser Lys Val  
 850 855 860  
 Ala Gly Leu Ala Gln Leu Glu Gly Glu Val Arg Thr His Pro Asn His  
 865 870 875 880  
 Pro Val Leu Arg Lys Arg Glu Asp Arg Ser Asp His Asp Leu Ala Cys  
 885 890 895  
 Asp Ala Glu Gly Ser Pro Val Glu Val Glu Ala Thr Asp Pro Leu Pro  
 900 905 910  
 Glu Gln Glu Gly Glu Ser Ser Gln Arg Arg Asp Lys His Ser Ser Ser  
 915 920 925  
 Trp Phe Tyr Gln Val Met Ile Ser Ser Ser Ile Gly Ile Ser Gly Arg  
 930 935 940  
 Pro Cys Phe Cys Gly Cys Ala His Leu Ala Val Pro Arg Arg Gly Ala  
 945 950 955 960  
 Asp Leu Arg Arg Leu Pro Leu Ser Ser Ile Ala Ser His Ala Leu Asp  
 965 970 975  
 Ser Ser Leu Ser Gly Met Asn Cys Phe Asn Leu Thr Phe Ser Arg Asp  
 980 985 990  
 Met Leu Leu Val Pro Ala  
 995

<210> 13  
 <211> 99090  
 <212> DNA  
 <213> Oryza minuta

<220>  
 <221> misc\_feature  
 <222> 23216  
 <223> n = A,T,C or G

<400> 13  
 aagcttggtt ttctcttcat gaacaagctg tcgattgggtt tggattgtag cctcgatgtc 60  
 cttgcattcc cggagatcgg ctaacctctg cctggctttc tccagtttga attgatgctg 120



ctcgaggtag	acagctggag	taagagcatc	gactaatctg	tccggaagag	aggcttggat	180
atctgcaaat	cttgcccgga	tcgagccaca	gttggtcacc	aggttatcta	gtgatgctcc	240
tagccgatgg	gatatgtctt	cgagtgtttt	cttcacatca	tcagacagga	gagctgttgc	300
tttactgggtg	gtgtcttctt	ctatttcate	gaggtaatct	ttgatgtcaa	aggagaatag	360
atcggctaag	acctgcaaga	gacaatatca	tggatgatta	aggatcaaga	tatgattggc	420
cgatctcaag	tttatgttaa	taaaacttac	tggaaatagta	ggtgcagcta	attgttcttc	480
ctcttcaaca	tgatgactac	ctgcagccga	tggagtgcgg	ccgcctgatt	ctacctgcat	540
aagaggggaa	gaaggaggag	gaggctgcca	aagggataaa	tgttagatat	aatcagccca	600
agtcagttaa	tgagatgata	gaagtatctt	actgggtggag	ctagttagg	ggttggagta	660
accgatttct	tcctcacggc	aattttcttt	ctctatattt	attaaaattg	tgaggaattg	720
gctataaagt	aaatgactgc	aaaagtggac	agagaaagtt	gcttaccctt	gccaattgag	780
ctggagcaga	agggaatgga	ggagcctgct	taggtgaagc	cgatgggtgt	ttttcagtat	840
cgcttatttc	ggctgcagct	tggctgatgt	cttctctgat	ttcttcttca	tccagagctt	900
gttcgatgga	tggatctagg	gcaggtagat	cgtcagctgg	cttagctttc	tgtcttagcc	960
ttcttcttcg	gagccggggc	tgaagtatct	gcagccgatg	atctggttct	ccgcttcttg	1020
ccggcatcgg	ctggttctct	gatgagtctt	cgagaaagtg	ctgaggtctt	tggggcattg	1080
tagccgatgg	cagaaggaga	tggccacctt	ccattgggaa	tcaagcttgg	ggcatattca	1140
atttctttac	cactattact	ccggcgagga	ggagaagatt	ctgttgtctg	cagatcagaa	1200
gaaaagggtta	atcaagggtt	aaatcggtcg	ttggttattt	aagtaagagt	gataaagtga	1260
agacttacct	gaggaatggt	atcagggaat	aggtccgtca	tatacatgga	ggccaattgg	1320
tggaacaggt	gcagtttcca	ttcacccccc	tatctgtcaa	atgccctact	cctgaacctt	1380
gccagcttta	tgttctcgat	gctgcccac	ggaggtccgg	ggatgttcaa	cagccgatcc	1440
atcattaaag	ttgaggagat	gtcgttcttg	cattggatct	tgtcggcaaa	gtacaggcca	1500
attggcaatt	gtcccatctc	aaattgtttg	gccaatgaca	tccgatgata	aaactcgtag	1560
gagacttggg	tatttctccc	ttgatggatg	ccgactggga	ggatacatgg	gctgatagca	1620
gtagtaaaga	tttctctgga	ttgctgaaac	tttcatgat	taatatcttc	gaacctgaaa	1680
tcggctggca	gttcgaaatc	cattgagtcg	gcatagaaga	accaaactca	ggcatttttt	1740
tggactccgt	cataaaagct	gaagaacaag	tccttcagaa	gttcaaccga	taattttgtt	1800
cctgactcag	ctggtgtaga	tgcatactct	ccgatgaca	tacatctgcg	atgggtgcgt	1860
tcttctccat	catcttctac	aatcggtctc	aaccttggaa	attcagcttc	tgtcacatat	1920
ggccgattga	caactttcat	tactaccagg	ttcagccaag	attgcaagag	ccaccatggt	1980
ccacctgttc	taaccactga	gccgataatt	atcttggccg	atgcgttgtt	taacatctgg	2040
tatagatagc	cgagaaggat	tttgctaag	ggaaattggt	tcttcgttac	tagggcctcg	2100
gctaagaatt	gccagttggt	tgtaggaccg	cagcttgatc	cgcataaaaag	gaattttacc	2160
aaccacatca	gcagaaaagc	tacttgttct	ttaggagtga	ctggcccttt	gccccatata	2220
gctgtgatata	atcctgacca	acccccaatt	ctcttagttt	tgaactcaaa	agtgttcttg	2280
gtgttttaggc	tcatgggggt	agccgatgag	gttacatcta	ggccagttag	catgataata	2340
tccagcagcg	ttggggtcac	cagcccttga	ttgaaaagaa	aggcatttag	agtgttggac	2400
cagaaataag	ttgcagccgc	caacaggggt	tcactcttgg	ccgaatttgc	tactgtaagg	2460
gctagggctt	ggctgattcc	gatctcatcc	caatgggctt	gcttgctatc	cgatatccgc	2520
ttataccata	caggccagct	tttctccaga	gaaggccagg	atttgaagg	gtttttccaa	2580
tggcttgggt	ttggaattgg	cgacctaaaa	gaggttctat	tggtttaggc	tatgataaat	2640
tcagtagggt	ctagattggc	gattggaccg	agaaagtatt	gttggtcatg	caacagactg	2700
ggaaccacaa	caagattgga	aagatgctac	aagaatagag	aaggagaaaa	cgggataagg	2760
cgagcgaaaa	ccggtctaatt	gaacggaaaa	gggatctagc	cgatggggac	ttaccttagc	2820
gtattcggct	gatgatgcgg	cggtcggact	ggtggagggtc	gacatcgtcg	cgggtggaga	2880
tctggccggg	agtggaaatc	tctggaaatc	gcctgcgcg	tcgaggaggt	cgccggagaa	2940
agaagacggg	atctgcttga	gcggtgaaaa	cggagaccat	ggcgtgaaga	ttctctgggg	3000
cgagcattag	tattttaaagc	agagcgataa	cggtcgggaa	aatggcaagt	gcgagtttct	3060
ctcggagtcg	gtatatggca	aatccgaaac	attatccaat	attccggact	tggggggcat	3120
gtgttaacga	ccaaatttgg	taaattctat	cactatttagc	atcggagatg	aaaatcagat	3180
cgaagtggaa	tccaagatga	agatcgttgc	ggagacagag	taaaaatcgg	ctgcagtcta	3240
aatcggtcaa	ggtcaggatc	ggcagagtcc	gagttggacg	gggctagccg	atacaaccga	3300
ttccgataat	atgaccgggt	gaacgtcatt	gggtgattcc	gatgagcttc	aagggtgattg	3360
ccatgcttgg	atagagtctt	gggaaggcga	ttgtatctat	taattaggat	attctatgta	3420
atttctcttag	agatatgttt	gggcaaaagt	ctgccgtaaa	gacttatggt	atcttagagt	3480
ttgttagaga	taatagtcgt	gtccgttatg	gacgtatctt	gtaatcctcg	ggtataaata	3540
gacccgagcc	ctatgtaaaa	aaaaaggaca	acacatccaa	tacaatctcg	gcgcacgcgc	3600
acccttttgc	tttactttta	tttcgacgag	ttcgtgctct	cgggttagagc	tgcacggtt	3660
tcgatcttca	acaagaggta	aaacttgtca	tgacgactta	tgttcttagg	atttgtgctt	3720
ccatctttat	gacactctaa	tcttgtctat	ataatctgct	gagttatcat	atatctcaca	3780
tagtcttcga	taatatcttt	atctaacccta	taatcggcta	acatctgcta	atggaaggca	3840
gctgattagg	ttagataatg	acattaactt	agattatgtg	atatatctac	cactctatga	3900

aactttcagc	ggcttgattg	tctagatatt	gttcttcttt	tcatacttaa	tgctgcatca	3960
gttgagtttg	atctattaag	tcgtgcttag	aattgcaatc	ttagcctgc	tttctgggtg	4020
ccgattaggg	tagtatcgga	gtttcagccg	atcttatctg	atttaactac	ttttatttcta	4080
tatgcttgat	tgacacgtta	aatccaccct	ttatgttagg	attttattgc	atctaagtat	4140
attaagctta	tgtttggtat	attctacttg	ctttaatatc	ttagtataga	gtgggatcgg	4200
agtattagcc	gatacatgct	agatctacct	gatcagctat	gttttgaatg	tatataaccc	4260
tactattaat	atataattcg	atctaagtga	tttatactgt	ctcggcaagg	caaccgatct	4320
atcccaatca	cttgatttaa	gtatataaccg	atataaggat	tatatatcat	taatgtgtac	4380
agttgatcga	gtagatttag	ttctgaattg	cttggtgata	tttgccgatc	gatgtacgca	4440
tgacatcggc	ttgaaataaa	tgatatgtca	tcggcatcta	gccgatcggc	tatcatttat	4500
gggattaatt	gcggtttctt	tggtctatct	ctgttgatt	gcaggatcaa	atcaactggc	4560
acgctcatat	atccgaaggc	gagttttgga	cctgcaactg	agttaagcag	atctcccagg	4620
cctcgtgttt	tctgtcaaca	taattatata	agaaatctta	ccaaaatttt	agcaagttaa	4680
taaaattttg	gcaactatgc	taaaattttg	gcaatgccaa	atttttggtaa	ggtttttttt	4740
agcatcaaag	tgaacaggcc	ctggataagg	gaatacgtac	ttttatcttt	gctgattcat	4800
ccaccgcagt	gtccgtcttc	ttgtactgtt	tacgtattgt	ttgaatccgt	cttcgtgaca	4860
cacaaccttc	cccttcaccg	ttcgcgagat	gatggcctcg	cggtcgcggc	tccgcctcgc	4920
cgcgcggcgc	gagaacccta	tcccacactc	caagtccggc	ggggaggagg	gaacggagag	4980
gaagccggag	gaggcgctgc	ggcgggaggt	gacggacctg	ggcggcggca	gcgaggtggt	5040
gcacgtgccg	cggttcgtgc	cccgggaggg	ggcgtggggg	tggttcgact	acctcgacaa	5100
gcgcattcca	tggacacgcc	ccaccatccg	cgtattcggc	cgtcccgccg	tccaggtaca	5160
gagaggtcac	cgccgcggcc	cgcgcctctc	attgaaccct	tcattttaat	ctttgtgggg	5220
cttccctaag	cggtcgcaat	tttgcctctg	ttgttcattt	gataaatttc	tactagtgtc	5280
aagatttcgc	tataggttgg	tgcatctatc	ttgattcttg	gaggaaaaaac	catagtacta	5340
tcttgcttgg	tgagattctg	aatatggtgc	tgaggttgtg	gtacttcggt	gagtctgaag	5400
aatggttact	gcaggcagtg	ttgcttacga	tttagctgtg	gcccttcggc	ctggggctta	5460
caaatttaca	ctaggcattt	gcgtttcccc	ggtaaaagct	ggttgaattc	ataggaaatt	5520
ggcataatga	tagtgactgc	agctgatccg	gatcctaaga	aatcatagtc	ggcagaaata	5580
gcactcgtga	tgtaattgca	gtattggtga	gttgttctct	ttaacgtctg	agctgaagtg	5640
taatttctgg	gcagaaataa	actatataag	tacatataca	ttagtgggat	ataaacaac	5700
tgataggtac	accagtggct	ctgataaata	ttactccctc	catcccaaaa	tataacaact	5760
tttgggtaga	tgagacatat	tctagtacta	tgaatttgga	taggggttat	gtccagatcc	5820
atggtactat	gatacgttcc	atccacccta	aaatcgttat	attttatgac	ggagggagta	5880
actgctaagt	ttctgatgtc	ttatgtccca	aacgatggta	gctcctaagc	tctgtaatac	5940
cattgtcttt	ccagaaaacc	acggttacca	ttgtcttcca	attggagaca	cattgatagt	6000
gtaactgttg	tgaaaagattc	tagctcaagt	atccatttct	cttactgttc	tcgagccgag	6060
agatacatgc	tatgtcgcgg	acgaagggtc	aacagatttg	agatatagtg	gccatcagcc	6120
tcatgcacat	tcttgggatg	aattccctgt	gctcaaggat	atcctgaagg	cggtgagagc	6180
tttgccatga	ttattctttg	caatgctata	tatgatttgc	agttaatttc	aagcattagt	6240
atttcaataa	gtatcaacta	gtttgtattt	gatgatgggc	atctcaaagc	tctcatttcta	6300
tctagtgtat	tgctgattaa	tgtatgttca	ataggttcat	gaagccctcc	ctgggagcca	6360
ttttaacagc	ttgctcctaa	acagatacaa	gactggttca	gattacgtct	catggcatgc	6420
tgatgacgag	ccgctgtatg	gacctacccc	agagatagca	tctgtcaccc	tcggatgcga	6480
acgagagttc	ttacttagaa	agaagccgac	gaaatcgcaa	ggtaagcggg	gcacacacta	6540
ggaaaatttt	tggactggca	gcctcactat	cattttaga	ttttggagtt	tagatcacat	6600
caactccgaa	atcgatccct	attatttccg	tcgaagaaaa	gattgatccc	ttttaatcta	6660
ccatccagct	tcacttggat	ctggggaagt	tgccgccgaag	cggctcaagg	tcagtgtctcc	6720
tcagcagcat	tcttctctcc	tgaagcatgg	gtcgtctgct	gtgatgagag	gctataccca	6780
acgggactgg	cattctcggc	tcccgaaacg	agctaaaagca	agctcaccga	ggatcaatct	6840
gactttccgg	cgagtgtgtg	agcatctttg	tgtacagcgt	cggaggcagc	ttccgggcag	6900
gtcgggcggc	tgcttgggct	ccatcgctgg	cgcgtacact	agagactatc	tataacatgt	6960
atataaaaaat	taatagatca	caggaaaaca	ctattagtca	cacaggagcg	atgggtgttg	7020
ccactgtttg	catggtagcg	atcttatctt	tgccctccctc	gatcttttgc	aattgtgcaa	7080
acttatcacg	gacattgttt	tggggagact	tgatgtttgt	gttctgcaac	tctgttagtg	7140
catcatacat	tctggcatca	tgttgactct	gtatcagcta	gtccgtactg	tgtgcaccct	7200
agtagcgca	gaccttagga	tttgggtcaa	ataacagatt	tagagagatt	tttcgttagt	7260
actagttact	gccctgtttg	cgtctagttt	tgtgtgaacc	ctgtaacaaa	tttgacagta	7320
atacacggct	aatgctgtgt	ttctggaaaa	ttttaaaatg	tactggttca	agtttcaatg	7380
attcatacat	ctgaactcag	ttgaactttg	tacagatggt	tacactggag	tcaaaactct	7440
taggacagaa	tatcattatt	atgctcaaac	ttaacatcat	aacaccaaac	ctaggctgcg	7500
ttcggtagta	gtagtaccca	atccatctct	ctctttttca	cgcgtacgct	tttcaaaactg	7560
ctaaacagta	tgttttttat	aaaaaatttc	tatacaaaaag	ttactttaaa	aaatcatatt	7620
aatccatttt	aaaaaaaaat	agcaaatact	caattaatca	tgtaataata	gacttcattt	7680

tgcgtgccc	ggaggactcc	tcccgaacag	agccctaata	taggatctac	cgattttactc	7740
atcagtccca	aaatataaga	aattttgtac	ggatggaaca	ctccagattc	gttacactag	7800
gaaatgtccc	ctccgtccaa	aactccttat	attttgggac	ggatgaagta	agtgttaacc	7860
agtttcagaaa	acagaaataa	tgttcaacac	aagcatatgc	tgtgatacac	catctgaagt	7920
atcaactcac	atgtcacatt	ctacatgcaa	aatctgtctgc	ttcagaataa	ggcaccccaa	7980
aattgggatg	cccattctag	ttgtacagta	caatccaaga	accattgttt	attgtttaca	8040
acattttctac	atgagtttta	acacataatc	actattcctg	caaaataatg	ctaaacggat	8100
atgtttacatg	acctgtggcc	ctctcaagga	tacgtatata	atgaaattcc	agggcacaat	8160
gccatagcta	attaagttgg	aaacaagttc	tagcatctag	taacattaga	agcaaatacct	8220
attccactgc	tcttctatac	taaacctgtt	gctattgcaa	agaacatttt	ctacatcaca	8280
actgtcaatt	ccaaggtcaa	ttaaatgaga	tatccacatc	cccatccgct	gcccgtagaa	8340
tctgcatcct	acgaagaata	atcaaccgag	aaagcaaagc	ctatgttgct	ttagctgtgc	8400
gttttttcca	gacactctgc	acatttaaca	caaacagtaa	aagaactgta	acagtaagaa	8460
tgaggaagac	tggtacaata	ggttcagagc	acaggcgatt	ttcttacaag	agtctcgttg	8520
tcagattcct	ccttgtctgt	taaattatgg	tcatcagggt	cctcctcttt	tggctcatca	8580
cctttggcag	acactttctc	agcttttgtc	ttcttggtta	ctactacttc	tttctcattg	8640
cgtccatctg	agataacaga	acaattgtgc	tctcaacttc	cttgcaagaa	acagcatgca	8700
gattatgggt	aaacagtga	ccgtaaaatc	aaccccaa	tatcatacca	gattttttat	8760
cattatcaga	atctgagtg	gcgagagaac	ttgatgaatc	cgaatcaata	ttcgcatac	8820
cggcagcatc	aacagaactt	ttaccccta	tctttctgcg	tttgtttttc	ggcagtcctt	8880
ttggtttgcc	tttctctctt	gggggtgagg	gcctgcaaga	taggggtaag	accaattgca	8940
ccaaggtttt	caagtcta	cattttatat	gggcttac	cttttttgac	ttctcttgtt	9000
caggcgccg	agtttgcctg	ctgctggtaa	tgtctttatc	ctgagctctg	caagttcaga	9060
ttacatatca	aacaaactga	tgtctatgac	acacgtatca	gtatgaaata	attagaggtc	9120
ttaaatatgg	aggagctagt	tcaggtggca	taagacatcg	tttgttcctc	ttggttacat	9180
gaggattcta	gaatcatctt	attctatgat	aaaatgcaag	atgtagtcag	gagatagcac	9240
tttttgttta	gttgttgaa	taattactgt	tcaggatgcc	taattcccca	gtgctgtaca	9300
ggacattttc	ccagatgctc	cagtgaagtt	tattatgcag	tgcactatat	gcaagaggaa	9360
aatccagctt	accgtccttg	gtttctccct	gaatgatcct	tttttcgggc	ctgcaataat	9420
ttgttaacaa	caataaacaa	aaaaaaaa	agacctaat	ttaaagagag	tttttatgac	9480
acaatttacc	atgctatacc	tttacaggcg	ggtcatcact	tgcaacaatt	tcccactttt	9540
cttttagctag	gttaagcact	tcaacatctc	catcatcata	tagcacctat	gtagagaagc	9600
agtcttttaa	atatactctg	tatatgggtg	attacaactt	agaattatat	tccagtttga	9660
actagaatta	taaatcatac	aactgttgca	tgttgtttat	gtgctcatag	tggttgacac	9720
tactgtagcc	tgaaggataa	cctgggtggca	tcggctgcta	gtgatgagag	gactataagt	9780
tgggttgtaa	gaacttgagg	gagagattta	tagattgaaa	ttcattgtct	aattccacta	9840
gaccagacaa	attcctgaat	gtctcttata	tataggccag	cacctaacca	tccaatctaa	9900
tagatagcca	actactctaa	ataaatcata	tctctaagga	aacctcctcc	tcctctacac	9960
gtgtctcccc	ggccatgacc	ttatttggtc	cgactgtgga	ccgtggccct	tggcctaata	10020
cccatgacaa	tagtggctga	gcaccaagca	ttctactatc	ttcatataga	attgacaaaa	10080
tgaaaagggtg	caaagcaatt	cattgtcttc	catacttata	tttgtgacaa	taaaatggat	10140
caaatagata	caacatgtcg	ataattta	gcaccatttg	agggaaacata	ccgtgtgtct	10200
tctttttgat	gaatcaaaag	attccacaac	accttcataa	aatctggtaa	agaaaaaagc	10260
aattaaaatc	taggccatct	tcagaaatta	gatagcacat	gaagaataac	acagatagag	10320
aactcacttc	ttatccaacg	gccaccaaac	ttttattctc	tttccaatca	ggctcctcact	10380
gcctgtgtca	tgtgttgtgc	actgcaggca	ttaattgggt	cttagtaatg	atgtttgaat	10440
gaaattttca	ctggagtgtg	acaaagtga	taccattggc	acacataact	tattctagt	10500
attttaattg	aaatattgca	tgaattttct	cgacatgtca	gaattttctta	cagaacaaaa	10560
gaaaacaata	gagacaacct	ttgctagacc	agaaaccaat	tttggcttct	gccttttgat	10620
cgaccatctt	aaacttcccg	aatcaacagt	tcgcttacta	ctgcctgcct	catcagactt	10680
ctgcaagagt	tcaacaaaaa	tcaatgaatc	agaacctgat	tttccactgt	agatccaata	10740
gatacagcca	tacagatgga	aagaaattac	ctttggacta	ctactcaaga	tttcagcgtg	10800
gggcttctta	gcaccctttt	tccctttgga	tacaggggtt	ttaacactag	caggcgatgt	10860
taccaactca	gtatcaaccg	agtcactctc	ttttttggcc	ccctcaacct	tattttcaaa	10920
tgagttgata	gtttcatctg	ggtcaacaga	ctgcagtga	agctcatcac	tgtttttgtt	10980
gcctttcggt	gaatgtggtc	tactcttaga	aactgatctc	ttgcgttttg	gtgttgaaaa	11040
atctacaggc	ttgtcattac	tctcttttgc	atccatccgc	tttttctttg	gtttgtctct	11100
ttctgattcc	cccaaatttt	cttgattgtc	caagtttatt	tctctaacca	gtcccaagac	11160
atcatcatct	ttttccatgt	ttattgaacc	agattttgtc	ttctgctttc	tccagcctt	11220
ttttgctcct	tgagatttta	aaattttcac	aatttttcct	agaggaaact	cattaccaaa	11280
ttcatcagtc	tcatctataa	gcactttatc	cttgggagat	tcaacctgga	cggagagaaa	11340
gatctaactg	caaaggccag	cagacaattg	atgctgagac	acagtatgga	cagaaaaata	11400
agcattatgt	acctcagcag	actttgtctg	cataagagcc	tcaaaatggg	ccaacacatt	11460

ctcgcaaccc	ggccatatct	gctcatcact	ctcctacaaa	atatcatata	atgtcaaaat	11520
aagaagccta	gaagagaaaa	ggcaagaaa	tgacacaaa	tgtaagcaa	gtcttaaat	11580
aatgggtgt	ttcatgctt	gtcacaggct	taacaagcat	atatgacata	ccacagaatt	11640
ttcattctga	tccttctgaa	ctggcgcata	aagtgtgact	ggcagtga	ctgtttgagc	11700
ttctgatata	tttatctgct	cttgacataa	tttctttcca	ataaggatac	caagatcaca	11760
aatagcatgc	agtgtctgca	aacaacatac	ttcaaatcta	agtcatacca	aatagcaagc	11820
aagatgtatt	acagtggatc	agcacaatt	taaaacaaat	gaactcatta	attaaaacat	11880
tttcacacct	tggctctgtt	aacatcaacc	acatcttggg	aatatttgat	acttttaaat	11940
atagatacta	ttgttgtgaa	gctctccttt	ttcatgcctg	gtacactgtg	ctgcaaacc	12000
tcttccccc	ggaggatcaa	aagaagcaga	tgcaatcgcc	tggaaagagc	tttttgataa	12060
gcataatat	gcaagtacag	caacaatttc	agctacaaga	atttacgagg	gtattgcatt	12120
cgatttatta	ttctcaaaat	tcaacaatca	cagaacaaac	tagagtctgc	caagagacca	12180
taatttaaca	gccataagtg	tgattttgaa	ttgagcta	tgacattttt	tactggaata	12240
aagttgggct	ctaattgact	tttctcataa	caaatccatc	ccaaatgtta	tttgacacct	12300
tagggttagc	aatctgatgt	ttcacacgca	aacttagaat	tgaagtgga	attagttaca	12360
gcagcatata	cttgtatgta	cagtgtattt	gagcagtgat	caagtggtag	tatgaagaaa	12420
aacgcaacgc	cattacaatg	atatcgttga	agaaataaaa	tcactctgatc	tctttcagaa	12480
gatagcagat	aattgaccaa	cgatttaaaa	gtctcatatt	tccatgagtt	gagggcatca	12540
attaaacaac	attactagag	ttgcttctac	ccccagtgga	ttataaccct	gagtgtatt	12600
aaagcatgat	ttatgatgg	acggaaatta	gttctctata	agttacatgg	gtaaaaaatt	12660
caatagacag	attaaaacag	aggcactatg	tgaatgaact	ggtcattatg	tttggagctt	12720
aaagtattct	tttctccaa	gcagaccgt	ggctattctt	tttaatagat	cagcaaggag	12780
aagggtccca	aagtcaatat	gttgggaaga	gtctcataag	ttgttgagta	gcagggtagt	12840
gttgggtcca	aggcttgtgt	tttctgttgg	gtgagtggtt	gtgagtggtt	tgttgcccc	12900
tttctctggt	tggtctcttg	gatgggtata	gtgtgactaa	ttctattttt	cactcaagga	12960
tgaataaaca	gagcccagc	catctgttcc	caaagaaaga	aaagaacaag	caaactaatg	13020
gtaaattggg	aataagcatt	agaaaaaaa	actttgagcc	attattagat	accagtaaat	13080
tggaccaaat	gcttcaacat	cctcatgctc	ttcaatgtta	ggacatgatg	gatcatgaga	13140
gagggcatga	acaaaatagg	aatcatata	ttctggataa	gcagttagca	catttgtttc	13200
cgcttgagca	gaaagtggc	gcactttaac	ttctggcat	atctgcgcaa	cctcaattat	13260
gttgtgctta	aactgagaag	ggaaagaaaa	caaagaatt	aaagaacat	attagaatga	13320
gtacagtgg	ggaaatcaat	taatttttcg	agtttagagt	atgaacctct	tcatactgtg	13380
gggcatgata	atcatccata	gctaacaaga	aagcacaagc	atattttgca	tccaaggccc	13440
tttcttaat	atattgatgt	actttactaa	gaaataattt	cctcacctga	ggaacatcat	13500
cctggtaata	aaagaaacca	taaatctcca	aagaagatac	aagtgaatca	tgtgaaagga	13560
acagtaagag	tatgctaagc	tgatttatgc	acaacgcata	cctgtgaaat	cctgagagtc	13620
aaatagaata	catcaacagg	cactttgtgg	tccattgtc	ttgataagcg	gagaacagct	13680
tttctgccc	ccagcctcaa	atgggcctta	tcaatagtgc	tgcaagtaat	ggagttagtg	13740
gaaataacca	aacacacaga	caaagagaga	gagaagaatg	gcacattaaa	aagcatatct	13800
gttggtagtt	tgctaccttg	aatcatatt	tgcaaaaata	tcacatattg	taaggatatt	13860
cttaaggatg	cccatatt	tttcaattcc	cggatgtgct	tgagcatctt	tgcaagggtg	13920
acagctcttc	accaaagttt	taatgccata	aatctaggaa	gaaaatacaa	aacaacatgt	13980
agaggtcaat	taactttgat	ggatggattg	aggtgagacc	tataaaacca	taatttcat	14040
aaccttcaat	aaacaacttt	gagtactatc	actccattca	gatttatgag	cagaaacgtc	14100
gcccgaatcc	tggtagtgca	ctccgaattg	caataaaaa	ggaaataaaa	tggagaagga	14160
aaggagaaat	ttaaagagcg	taagtcttac	atcattgcag	tcaagaattt	ttttagttat	14220
aaaatttatt	atctcttctc	cccttgtttc	aaaaattggc	attgctatct	gagctatata	14280
cccaaaggat	tgtaagatgg	atggcaaatg	cactttcttt	tcctccaaca	agtccacaag	14340
cctctgcaag	gttacgaatg	tagagcataa	catgttagaa	atctcaaata	tatgatccaa	14400
gaagaaacag	ctaacaacaa	atgtgaacct	tgtaagaagc	agatagagac	atcaggccat	14460
catcttttgt	tatagcagcc	aaagcatgaa	cagagtattt	tgctgtcttc	cgtgttcttc	14520
ccaaacatag	ccgtcttagt	agaagagtaa	tggaaactgaa	acagaaggca	cagcatctta	14580
gttctatact	cttatatcct	tattaagtag	tgaagaagaa	aatgtctcat	tcatttcaca	14640
aaagtgtcac	cttgatgaag	ctagtgttgc	acgaatgttg	ccaccagcct	tcgacagaac	14700
atgagcaata	ccctctttaa	gtagtctcatt	actcctcttc	aggagctcaa	tgatattctt	14760
ttcaagtcca	gacaaaagtg	aagggaagaa	actagatact	gctgcaatg	tgtaaaacaa	14820
gaagtaatgg	gaactgtcct	gctgaagcat	gataaagcaa	atacacacaa	gggatataga	14880
agagataaac	ttgctcagga	agaaaaatat	cgggcattca	taaacataag	taatttagta	14940
acggttactt	gtagcttagc	ctgacaatgg	tctttcaaca	gcaatgctcc	ttgctagcta	15000
gcctaacaat	ggaattacca	cacaacccca	cgcaggcaac	tcctgaacta	gttgttgcat	15060
gttctcttca	tggcaggaaa	ggatgaccaa	aacgtttcaa	caaatacatc	cgttaaaaga	15120
tccatgcatg	ttgacataag	ttttgtattc	ccagtagatt	tttggtcaga	agcttcagaa	15180
aggatctctt	tgacatatcc	cttgttcaca	agtaaatatg	agcatctcat	cgacaacgtg	15240

ctcacaaaat	catgtaatgc	atgtttttca	ccaagtttcg	ttagcaaadc	aacctgcaga	15300
ttacaaataa	tattcaaata	tagcagcata	caagtaaatc	aaattaggta	actgaaaagc	15360
aataaaaaaa	gtcaagtata	cacccttttt	ttcatatgaa	gagttcatat	tgggtcaagaa	15420
taatgcagaa	aatacaataa	aataactatt	atagaggcaa	ctatacctga	ctacatgcag	15480
cactggatga	gataaatgga	accacaaaaga	agaaaagcta	gtgttgcaaa	caagctaaaa	15540
gaattctttt	tcttaacata	tactgctctt	ttttctattt	catattgcaa	gccaaacaaa	15600
ataatcatct	gtaatctgta	aatcaaattg	agtagcaggt	acccgaagag	accaatcttc	15660
gttgaatggt	gttgaacaat	caagcaagct	tgtgaatata	ttccagatgt	tggcatcttt	15720
tatctgatga	agcatgttca	agtactcctc	agactttgta	tgatcattga	acaaacgaga	15780
catgctccgg	aaacacccca	ggatcttttt	tttcatatca	ggggtatctt	cctgcttgca	15840
aaaggaactg	ataagatagt	gatagaacag	acagtaattc	tgtagtgcac	ttgactattc	15900
aagattcacc	aacctggcct	gtctgtcgaa	gggacatgta	cttcagcatt	tcttggtgta	15960
gcctgaaatt	gaagaagcaa	caatatatca	gagagagaga	caatttatca	aactaaacga	16020
tctctagaaa	gtaaaaatag	tgccagacct	ctgtttttgc	agaaaaattt	gctcgagagc	16080
tttcatctca	actttgtcga	aatgtgtgac	agcagttacc	caatgtttca	ctctttcctt	16140
gtgtggatac	tctgggtgga	acaatgaacc	acataaaatt	gattcaattg	actctgggtc	16200
gcatcaaata	aatcaaacaa	atcaatgggc	atcacctaac	cacaatatct	tgccacagaa	16260
agaaaagggt	atgttatgga	attcttgtct	gatgtgttgg	tgaaagagca	atgtgaaatg	16320
ctattaagaa	aatatcatgg	aaagagtacc	ataggaagca	tgaaacatta	tagatggagt	16380
agtacataga	gcatatctta	gaggtaaagca	aagaacagca	agatatcttg	catgtacaat	16440
ggggattgag	gaagcatgac	atctgatcat	aaatattgag	cagtttacag	gtttgtatat	16500
aaagcataat	acaaatcgcc	acaaggatat	taagtaccct	tacctaaaat	ctttgtcata	16560
gaggcatctt	aatatttttc	caggaatcca	ctcaaaatca	tcagaattta	ctgagctatc	16620
agaaccactc	tggcaataga	actttagat	ctagcccaat	ctctccatgg	tatagcactt	16680
cacagaaacc	tgattttttt	aaaaaaccaa	ttatacacca	tgcattcaag	tgaatcgtac	16740
agattatatt	catcaaaccat	aaatattgaa	agatgcagca	aggggcaaac	agaactaact	16800
gatttatcac	ggacacgctc	cgcaacttgt	ttgatagttt	caactgggac	tgaccaagt	16860
gaatggcaag	ctacatcaca	aatagcagct	accacttgct	ttctcacatt	ttcttcataa	16920
tccaacaatc	tgtcacaaag	tgctctgcc	aaggagacaa	ccatcagtac	aagcacaaat	16980
gatggcacat	tcagattata	ttatcagcta	ttcagcaaat	agctacttac	tgataatctc	17040
ttgagcttca	ggacgggaat	ggtttgacat	cagacatttt	ttcaaagtct	caattacaga	17100
aacacgaatt	tctacagctc	ggtcagtgca	tctcttcagg	aactcatcga	aaagagattt	17160
aatgattcc	aagataggga	ttccaggtaa	agagaaaagt	tcgccaaagta	tttcaactgc	17220
tttagaccga	gtttcaactt	catctgccta	gaaaatgccca	attacaaact	ctaattaaca	17280
aagacaaacc	aaaattttgt	cacttaaatt	aagatatatg	gatttttttt	ccggaagatg	17340
gaagattatt	ttctgttccc	caggcaataa	ttatttcata	ttgcacagta	ttgctttaag	17400
tatataagta	aggttctaca	taccagcagt	ttcccagtta	tataaggtag	caccacttta	17460
agaacctttg	gagcacactg	gtacaaatca	aatatgactt	cgtgatggtc	aatgctatta	17520
ttggtagaag	taccatcccc	atccaaggat	gatgtcagaa	tcttccttat	gtatgggtca	17580
agttttcctg	cagagtgcct	tataacatgg	cgagcaagct	tgcgtgcagg	caaagaaaca	17640
ccctagagat	taaaaaaaaa	attgcacatt	aagacttatt	gaaggaaata	gtaaaggaaa	17700
aggacaaaat	aatagagaag	cagtttctct	aacaaatcac	agaatagggtc	caaaaaaaga	17760
tttaaaaaatg	gaagggcactc	acagtttttt	ttccggcctaa	agttgataga	agtacattga	17820
gaaggctttc	ctctatatcc	tcgctttcat	ctataattag	ggccattact	gattgcattg	17880
aatttacaat	atttggctca	tgattgtcac	tgcatcaatt	caaaacacaa	tgagtaaaat	17940
attttaagcta	tcaactagca	gcaatattgc	gtgtatgtca	cttggttagca	ttaatagtct	18000
tatagtcaat	aattttctggt	tgtgtgcttc	tgatttagta	caatagaatg	aaatatttta	18060
catgtcaaat	aacttggtc	catgaaacag	catactataa	ctacactcgt	gatggaatga	18120
ggagagatgg	ttgatgcgg	gttctaagtt	gaggttggtta	gcatatatgg	gcttccttaa	18180
ctgcaagagt	tcaaagaaat	caatgtttta	aacatataga	gcagcaccct	atatatcaaa	18240
actgcatgtt	aacctgcagt	agtgtaaatg	tgggcatcca	ctcattaact	tctctttgga	18300
aattgaaggg	tcgatagctg	tatcatgact	tctcaaaaaa	tgcttataa	ctgatcaaat	18360
aggtatgtca	ttcaaatgcc	agtaaatatg	gtcctctaga	tttgaattta	caaacaagtc	18420
ctttacgcag	tgcatatatt	gaaaatgagt	aagtacacat	cttagtcctc	aaacagaagt	18480
taaaacagca	cttcgtgaac	tcatacttga	attctattga	acattttttt	aaaaataatt	18540
agaaacaagc	atgataaaaat	aagtcattgt	caacaatgaa	caaaatgtgg	aaactagtcc	18600
atgtgcgggtg	aagtatataa	aaccaacaac	attacatcca	aatggataga	gaagtattac	18660
ctgataatth	ctaaaaaaga	tcggaacatg	tctgcaatta	gatcattgca	ttcaaggctc	18720
aacatgacaa	cacatgctcg	gtatctcgca	actgtttcca	gaatagcaac	tctcctgcca	18780
aaggatttac	cattaacatc	attgagtcca	ctaaatgtat	ccacaatcag	atgaaacatg	18840
tctgcaaat	gaaattaa	ataatcctca	aatgttgaat	aaatatagta	aaccgagtca	18900
aatataatta	gtatattgct	ttctggaagg	atgcttgatg	ataaatgata	ataataccct	18960
taagacatca	tactgtatg	gagcttcagg	agcagttatt	cttgtaattt	cacagaagca	19020

tgttgccaat	agtactttga	catcttcatc	gtgggtgttc	agaatttcat	ctctggcaac	19080
agccttttaga	catgggttga	tagtttccat	cactgagggg	cctggtgact	gctctactcc	19140
atgtaggcat	tctgcagctt	gctgcagtac	gatcagcatt	aatagcatat	ccagagctta	19200
cttaagcaag	gaggaagcat	ttcaagcata	cagtttagtat	tgctacagat	gcaagccagt	19260
caggctgtcc	aaccaattga	ccatattaat	tcttttgttt	gacaaattag	tatacacagt	19320
caggcatgta	tacaacaaaa	atgatatact	ttaaatgtca	agtgaacct	caatgagttg	19380
gaccaattaa	taggcaatca	aatatagtcg	gtactgtact	actgctatta	ctccctgtga	19440
cccgtttctag	gaacagtact	acatagcaga	taaccatatt	cttaagaatc	aactttcttc	19500
agtcattaat	accaacaaaa	tttcagtgcc	ccttataaaa	aaaagtgtat	tttttagatt	19560
tttaaccaag	cttaaagcct	atctgcttca	gctaaacaaa	ccaaaatggc	tgattactaa	19620
gggggaagtt	tcacatgcaa	actacttggt	tctggagtag	aatagttgca	gtcgaatgaa	19680
tccaggtaac	agtgtaacac	ctaagcaagt	tcaaaaagata	tgatccctcc	taactatttc	19740
aaatcgggcg	ctagctgaaa	ggttccatac	caaggcaaa	agaacaagga	aagaacaatg	19800
acctgattca	ctctaaacaa	tagcagaacc	acagtaaaca	caagagcaat	tcagatgaac	19860
tggcattacg	gattccaaac	ctaaaaatag	gtgtgcctaa	acctaccaa	atggcctagt	19920
taatatatag	gtgtcaatca	aatcacccaa	gtgcatttcc	acaagtatca	ttactgccta	19980
aaaatttcat	ttacagataa	agtagctgat	gatccttcaa	taaagatagt	ggctgtctct	20040
aactgcaaac	tcgataatcc	gatctacatc	acaatatcca	atagcataga	gttattggca	20100
ccagcacata	caatacattg	gtcaaaaatt	taaactaggg	tacaatgttg	gccaactgcc	20160
atTTTTccta	gctgattagc	tataaacaac	agaacaaaac	agaagtaatc	taagagcata	20220
cagttagaaa	agcactcaat	gttaccacca	caacagacaa	gtgtcgggat	acaaagagtc	20280
caccagtttc	agattttggg	atctaaaaag	taggattcga	atgagaacct	accaagtaac	20340
tttattctaa	gaactattgct	gagaaataat	accatgtgac	catagaaatc	aatgtactgc	20400
tagccgacaa	aattggccata	taaacattat	cataggtcta	gaagtgtctt	ttgcatttcc	20460
gcttaactac	tgaacacccat	ccactacaat	gttaagcttt	aataacttaa	gatcccaaaa	20520
ccctaacgat	aagcgattaa	gcacacaaaa	caagccaaaa	atacacatgg	gtcccaccac	20580
tgcacaattg	agcacccaaa	accttaacat	agttaaagtt	cactatgttc	ttagtcccta	20640
tagaaaatct	aatcagccaa	agaagcaaaa	gagacacct	gaaggaaatc	actaagtaca	20700
acagaaacac	agctttccgaa	ccattaactc	cgaattaccc	aacgcatttt	ttattttggg	20760
aagcccacaa	ctatcatctca	agctaaacca	ctaaactccag	cagcaaaacc	ctaatttgaa	20820
aaacacctac	cttctaaaat	cttgtacctt	aaattggctg	aataagcaag	attcattata	20880
ttaactcaaa	tgagctgggtg	tctgaatagt	tcagaccata	aaattttttg	acaagataaa	20940
caaatttaaat	ttatttcaaa	aaaattatct	ataaaattat	gaagacagaa	atgtgggtatc	21000
aacaggacat	aaaatactta	tagatatgaa	ggcaaaactc	taatattgtaa	tatgtcctag	21060
gtctataagt	ttccacatga	acatgaaatt	aatttactta	aaagtcagct	cactgaccac	21120
aaatcagatt	tttctcttct	tcagtacaaa	atgtcaatcc	accacagaac	caacctacaa	21180
aagtgaagaa	cttgcaatag	taaaaccgca	acgacacgcc	acgaaactag	cgtctttcac	21240
cactaaaacc	ccataaaacc	taatctggca	cgacaaaact	gaacctccct	aatccagcac	21300
gacaaaaagc	tccaaatcgc	agcattgcaa	ttcatcacc	aaaacctcta	acacgccaag	21360
ctccagcaga	aaatgccttg	cctcccgagt	agtcccacca	aacacagaac	gggaacaata	21420
ctacaagcaa	aacgcaccac	gtacaccgcc	aattccagca	gaaacgcggc	ctcccaaatc	21480
tcacccaaaa	aaacaaacct	tcgtctccta	attaccgggc	acctgcacat	aaaccgtgcc	21540
ttggacaccc	tcccagatcc	caaacagcta	atttcaagct	aaagcaacca	aattccatca	21600
ccaaaaaccc	taattcgaa	ccaaaacccc	accacaatcc	cccaccgccc	taaaccctaa	21660
acctgccgaa	ttcgccca	gatccacca	aaaccgcgaa	cctcacaccc	ccctccctc	21720
ctccacaacg	ccaaagcaaa	agcaaccaac	caaccacacc	caagcaccga	acctcccaaa	21780
gagcagtaac	aagtctcac	ctcgagcagc	ttggcgaggt	cgtcggcccg	gtccggcggc	21840
gccgcctcca	gcttctcccc	gagctccttc	agctgtctct	ccgctgcccc	catccccggg	21900
ccagatcggc	cgccaattca	cgcacctccc	tctctctctc	tctctcctc	tctctctctc	21960
tctctcgctg	gggtttctaa	tctgagagga	ggaggagcgc	cttgtctttt	tggtctctgc	22020
tgtttcgaaa	attgggtgag	aggagagagg	cggagagctc	gtgaacggaa	tgccccagtt	22080
cgggatcggg	tttgggtctc	tctctctctc	tctctctctc	tctctctctc	tctctctctt	22140
ctctctctcc	tgctgtacc	gtttggaagt	catcatgcgt	cgggcacggc	gccgcgtgtt	22200
ccgcgggttg	ttctccgggg	gttgtggctg	acgcgtgggg	ccaggaggag	ggcgcgggcc	22260
gcgtgtcggg	gggggggacg	gtgagggggg	tctcgggtgg	gttttaggag	tttttagga	22320
cagcgttttt	tgttttttat	tttgggttgg	tttgggcctg	cggggtggga	tactgggatg	22380
ggagagagat	gcgtgcgacg	atggggcggt	ggattcgggg	ttaaactgaa	gtgccggagt	22440
gcagtttgcg	tttagggaaa	tccggtgatc	tacgggtgtg	gagtgctgag	tacagtacta	22500
ctagtttttt	ccctccactt	tgtattacgg	tgttcaaaaa	tagttgtttt	tttttgccaa	22560
ttatgtcctt	attaggaatg	ttaatctcgc	cacgtgttat	ttatcacatg	gattctaata	22620
aacctagggg	ttatcgggac	atgtacgagc	agcgtcactg	cggcccaagt	ggtcagacct	22680
cgaagggatc	agtggttccac	agtgggcggt	ggatggaggg	ggcaactagc	ggaagagaga	22740
agtgggagtg	tgcttagagg	gatgggtctga	gaagcgcctg	accgacggtc	aatggtggtg	22800

acggcgaggc	aggggggtggc	gccactagc	catgggttgg	gagaaggcgg	tggagtgggg	22860
tcggcggttg	gagaaacaag	tgtcaaccag	ttaggttggg	tgcgcgcgga	ggacagcagc	22920
aagcaggtat	tactctgtca	aaaaaaca	ctctagctac	gaatatggac	acgtatgtgt	22980
ctagatttgt	aattaggatt	tgaccttttt	tagacggagg	agataggctg	caacaatggg	23040
gtgcaaatgc	gggagatagg	agtggcatct	tagaggagat	tgagtgggag	aggataaggc	23100
ggagagggaa	atgagccgtg	ggccagcatg	gggtgggtcg	tgtatgcata	ctagccttcc	23160
cctgcctcat	tggttaaggt	atgagttata	agccaagaaa	aacaaatgaa	gcaaancgat	23220
attctattct	aaaataataa	aatgttctta	gctgtccaga	agctaaagct	aaaaacaata	23280
gaaaaaccaa	catcaaatct	gaataccctc	ttgagcggtt	gtcgggttttc	acaataatag	23340
gcttgaacaa	aggaaaactt	tggtatattt	tcgtaaaatt	aaaaattatg	tttgaatttc	23400
ttgaatttgg	tggtatatat	gctaagcggt	tccttagttg	ttaaacttct	tgagatggcc	23460
cataattact	ataatcaaat	ggttatgtcg	acttttggaa	ccttgtttca	caaagattaa	23520
cataattgaa	tgattttttac	aaatatgcat	gtgccagttg	gagaaacccg	agactactag	23580
tatggaagtc	atcttttttt	taaaaaaat	tttgagggtt	caagtaaaaa	atcttcttgg	23640
ttcatgtaga	aagttaggat	tttaatttga	agttgtagag	ttttgagttg	aaagttagtg	23700
gacctcccat	aaaactatct	atatatttca	atttaaagtt	tgactctaata	gtagaaagat	23760
tcggaacttg	ggttgaaagt	tcaaagccac	aagtaaaaaa	gtttgaaaat	ctgagtaaga	23820
agtatgaaat	ctaggtcgaa	gtttatttca	tgagttgaaa	gtttctttta	ttttttttcc	23880
aaggctatgt	gtggagacct	ctaaagagaa	gggcatgcca	tacggcgcat	ggtaccata	23940
tgggaaaact	ttgaaataca	ataaccacca	accattttgc	ttaatatgtg	atcgctctga	24000
tttataaatg	attaatcaaa	tacaaaccaa	agggagaagt	tgattaggag	ctcttaccct	24060
acataacttg	cccaagtcac	atgttccaaa	ttgcaatcca	tgcagaaacc	ttttaaaagca	24120
ccacatcact	tgcaattgtg	ttactttagg	taaccaacta	ttcgatgttg	atcttgtatg	24180
gaagtttttt	gtttttatag	tataatgttt	tatgtctaga	atttctggca	ctaggcagtt	24240
gccaacggaa	tattatacac	cagtgttgtg	aatattgttt	aaaaaagcat	atatcatgaa	24300
aaggaggggt	atcgtaactg	gttcctagta	atattgaaat	tggtcagaca	tctaggggtt	24360
ttaagctatc	aatatagtaa	attgcacaag	tgatatacga	acttgtaagg	ttagtgcagt	24420
ctagtataaa	acttgtaaaa	tacttgttca	tgtgcatgac	ttgagtagta	catgcaaca	24480
aaggcaaaaa	cgtaacacta	tgtctaactc	tgtgatgtg	gatgttgatt	aggatgtgtc	24540
actcacacgc	gacaagagcg	ctaggcatgt	tgtgtttgga	agtagccgta	tatactggat	24600
tacttgggtt	ctattttgtt	ttccttttct	aaactgcata	cttctttcgt	ttataaacia	24660
cgcctttctc	aacacaatta	atgtgccttt	gggtggacta	acatgtataa	acccatgtgg	24720
catcctaata	aacatccaag	ttagcaaaat	taacgtacta	ggcatgtagg	ccattttgac	24780
cttggttcgt	agtaactacg	caagttcgta	cacaagttag	ctataagatt	cacacacgtc	24840
tcaatttcat	atactacaaa	tacaattttag	taagaaaaaa	aactattgta	tctagaaaaa	24900
ttatgtattt	aaaacacagc	atggatatgat	tcctaattat	cgatacatgc	atggagactt	24960
gtcatattta	gaatctttat	cattacaata	gtaaaataca	gggacttctc	aagatgaact	25020
tatccacaaa	agacttctct	ccattttatt	atttctctac	aaagagttac	cagattgtctc	25080
gttgcataat	ggctcatctg	atgcagaatc	ccagaatgag	gttgtaaat	agaactattg	25140
tctctgattt	caagtataga	taatttttaga	ggtgtgcaca	agagttgatg	acctttatcc	25200
tacagctata	ttatacattg	aaaaatgatg	tctcatttat	atataggaga	gatgccattt	25260
gtgcctgttc	acacaatcaa	atatttttct	tttatggct	ccaaaggaga	aatgcaccac	25320
tgcccttata	ttagagatgg	caacagttaa	ttcactgtcg	ggggctcatc	ccgcgtcccc	25380
gtcaccgagg	tgataaaatt	tcaccgtccc	tgcccccgtc	aaccacgacg	gcgctatatt	25440
ttcaccagcc	ctgatcacca	cgcggtgaac	ttttgccccg	tggttaccct	gtccccggtt	25500
aaagaaacac	aaatcaaatc	agcacttgag	tagttaaaca	caaatcagca	cttgagcagt	25560
taaacacaaa	tcaaatcagc	gctggcggca	agcttcgggc	agctcccggg	ggcgcggcga	25620
tggtgcagg	ctcccggctg	cacgacgaca	actcccgcgc	ccgcgtcgac	cgctgcaggc	25680
gacaggtagc	gcgacgctcc	tggcggcggtg	tcgatagagg	ggcggggaca	gtagcggcgc	25740
gcgcgagagg	aggcgacggc	gcgcaagggtg	gctgggtggg	gtggagtggg	ggtggacagc	25800
ggtgcgccgt	gcgcctgggtg	gtggtgggtg	tgtgggagac	cgcggtgtgg	tcgagcggag	25860
agccgctgga	ggagaggcgc	tcgactcgat	ctggaggagt	ttgaccaaag	actagggtta	25920
gcttttatat	atacctgtta	attgggcatt	agtattatgg	gcaaaaacgt	ttaaaaagtc	25980
tagattttagt	catctataca	gtaaagtcgg	gtcaccgcgg	ggggcgggga	cggtgaattg	26040
tgaccatccc	ccaccctcgt	catcccgcgt	ggtgtcaact	ttggaacctt	tttatttacc	26100
attgtggata	gatattaacc	atcccagtc	ctaaaaaggt	gaattcaccg	cgggaaaaacg	26160
gtgaacgggg	ccccattgcc	atctcttctt	tatatgtaca	tgaaagctag	ggttggagca	26220
tattgtctcat	gcctaaatcc	aaagatacaa	agcctatcca	aaatggctcc	atatttctct	26280
gcattctcca	tccatctctc	taaattttagc	tccatatttt	tttaattgacc	catgactctg	26340
ttttcaccta	aattggctaa	atacttgtct	tacttttagt	tatttatgaa	tataatatgt	26400
taattactct	taattattat	ttttataaat	tagttgtctt	taatgtatat	atatccaact	26460
actataagat	agggagtggg	tttggatccc	aagatttaaa	aaggaagagg	gggggggggg	26520
gatggacaca	gagtaggata	agatagggag	tggtttaggg	atatggatag	agggggattt	26580

ttgggtgttt	ctcttaaaga	gaaaagtcta	tatttagtta	tgcaactatg	gctttggtat	26640
gtgtctaagg	ctctgttcat	ttctggaagt	tcccaacctc	cacctcccat	ttcccgcgcg	26700
atgcttttta	aactgttaaa	cgatgtattt	ttaaaaata	tttaggaaag	ttgttttaaa	26760
aaaatcatat	taattcataa	gtttttttat	ctaatactta	cttaacaatg	cgtaatttac	26820
cgttttgttt	tccgtgctgt	gaggattagt	tccaacccac	cttgaagaac	atagcctaag	26880
gcggagtttg	tttcagcttt	taggctgaaa	ttttgtgatg	ctacgtgaaa	ttttgatgag	26940
ataagtcatt	agcacgtgac	taattgaatc	ttaattatta	caaaattaaa	aatatatatt	27000
tatacatagt	aattttattg	aatgaaacgt	accgttttagc	ggttgggatg	cgtgctcata	27060
gagaacctag	aagtagctat	tccaaaacat	tgcttagaac	gcaccctaaa	aaagaccatg	27120
gctttgggtc	acttttgatt	tctaaatcat	gaactcattt	acttttggtc	catgaactct	27180
caaaaccgtt	cgcattttcac	cccataagtt	caaaccagga	ttgttttcaa	tgatgtaacg	27240
tcaacatgga	gttgaccagg	gtgatgatga	taataataaa	caatagcaaa	ataaagaaaa	27300
aaaatactgt	gacctacata	tgtcaaaact	gcttcctttc	cttctctctc	cataatccta	27360
tatatgttat	ttactttaaa	ttgctaccta	aaatgacaca	tgatgccatg	tccttaaaaa	27420
ccctaccgtg	attatgtcaa	ggtttgaaat	atgaggcggg	tataagagtt	gaggggctaa	27480
cagttacagg	gtttcatagt	taagtgaact	ttttttcttc	ttaaaaaca	taacagagag	27540
tgcaaaacag	aataggaagt	gtgatataga	ggtaggattgt	attgcctcta	ctaaacgaat	27600
ctggaatttt	acattgtaga	ccttttaaaa	acttatgtta	caaatagatg	gctagaaaaa	27660
tttattttcta	gaatgagccc	tttttgacgc	accaacgcca	ttattactat	ggtccaacat	27720
gatagcacca	atgacattat	tgccatctcc	cttgcccctt	aaatggaagc	taagggctag	27780
tttggttcgt	ggccttaatt	ggccttgcca	atatttgtca	atttcaatag	tgtttagtgt	27840
ctattttggt	agaagccaaa	ttttgacatg	cctaaagaaa	tagaccattt	caatagttaa	27900
ataggctgt	tttgcttcaa	tccaaacaca	actttatcct	gccaagatta	gccatgccaa	27960
aacttactaa	aatttgatat	tgacaaaaat	tggttaaggtc	aatttaggtc	acaaagcaaa	28020
ccagccctaa	gtctcggatg	tgaaggggtt	acgttcagaa	cctatttgta	aaaaaattcc	28080
aaaatactaa	aatataaatt	atgtttctta	catatagggt	tttaatgtta	aatgtaaccg	28140
aggacctatt	tataattttt	tttataaact	attcattctt	ttgaatttct	tttataaata	28200
gattctcgac	gcaagtgtta	ttaccgttga	cgcccttcat	attagtgaact	tagctttttac	28260
ggtgaagagg	tacaaggaca	attatgctag	ccccgcgaaa	atgatctatt	tctagaataa	28320
gttttttttaa	aaatctattt	gtaaaaataat	ttttcgaaaa	taacaaaagt	aaaaactgct	28380
aaacgaagag	ttcctgcatt	tcaacaataa	ataaaactatt	aggaaaaaca	cgatgatccg	28440
tgacaacact	agtttactcc	tctgtgcacg	tggttccagg	caccggttac	cgtttggtgt	28500
tgctcctgtc	cggttcctcg	gtgtccagta	gttccactgg	gtggttggtg	ggtccgctga	28560
gcgcttgggg	cccacgcgta	gccttgttct	ctggataaga	aaactgcact	tccattttctc	28620
gtgaaaatgt	ctactggtag	aacagagtat	gggcccggcc	actaacttag	cctaagtaac	28680
atacctcaat	gggctctcat	agcccaatac	cccactgctg	attttttttc	ttagggcatg	28740
tttaaaatgc	tggaataata	aacctttcga	aaaaaaaaatt	aagtcgataa	cattgtcaag	28800
ttttgatagg	gtaagttttt	ttttgggatg	tgtttaattt	ggtgcccaca	tataggggtg	28860
gaaaaaaaaa	agctcgaaag	tcacgactcg	aatttcaggc	tcagcttgga	tcgactcgag	28920
ttcggagtct	taacgagtcg	agccgagaca	gctgttttgc	tcgttaagct	aacgagctga	28980
tcccagacca	gctcgcgagt	cactttgtag	gctcggtaaa	ctctcatagc	ccaagaatcc	29040
tacaggccac	agcccaatca	ggtggccgaa	cccagtaaaa	actccctccc	cgactccctg	29100
tcttctctaa	accctatcct	atccgccacc	tccacaaaat	cgagggctcg	caggcgccga	29160
ctcgcaacca	ccaccaacac	caagcaggct	gttatcgctg	ccttctcctt	gtgccgtcgg	29220
agcgcgcca	ccggctgctc	ctcccgcagc	cgcagggcca	cgctgacgac	gccgctcctc	29280
ccgcagccgt	agcaccacgc	cgaccacgcc	actcctccca	cagctgcaag	gccactcgct	29340
acctcctagt	ccctggaggc	ttgaacctcg	ctggtctgct	tcatggatca	ggagcgccgg	29400
ttggcaagca	tggaatccaa	gaaccgtagc	aagggaaga	aattgtcaag	agcttctccc	29460
tctagtttga	ctccagccgg	cagccacctc	gcctctgttc	agaagccacc	aagatagaga	29520
cctaaagcaa	atccaccaac	ctcacatcaa	gcaagtgtcg	catcaatatt	tttcacaatt	29580
tgtagcaatt	ttttttccta	attttgtcac	tgattgaacc	attcaacttg	tgatgcacaa	29640
tctgtagttaa	gtgttctata	ggtttgtttt	cttattctgt	ggtgcactga	tgatggacat	29700
agttatatat	tgaattggat	tatacaagga	cctaattggag	ggttcattca	gttaacgagc	29760
taaacaaagt	caatgagcca	gctcgagcaa	gctcgctgag	ttgagttgag	tcagcatttc	29820
agctcgttaa	gcctaacgag	ccgagccgag	ccagatggc	tttttaagg	agcgagccaa	29880
accgagcgag	tcgagctgcc	tcgatatcca	ccctaccaca	catataggcc	atcaaagttt	29940
ggcaacattt	ggaggttatg	atattttatt	gtgacgttga	taaattcctg	tgagcattac	30000
caacgtttgt	ttacaaacta	aatgtattaa	tatatcattt	tcctaaaaaa	aatgttacga	30060
ttttaaatgc	catcaatatg	aataaagccc	ttaatctctc	atcctactgg	ctgccgtggc	30120
acctaatagc	acatggcatg	tccacgttgg	caacgagcgc	gccacgtaag	tatgtgatgc	30180
tgcgaaaaag	acaaggccag	acagagtcac	agagctagct	cggtccagct	aagcctcggt	30240
cacgtaccga	ttccaatgcc	ttctcctgga	ggttaagtatt	ttgtgtccac	ttgattatat	30300
ttctttggca	gatgacgtgg	acgctgccac	ctggatgctc	tggaatccag	cgaagtcagc	30360



agtcaaatta	acaggatattt	tacaattttt	tttctgaatt	attgtggctg	tgttgcacg	30420
gtaagagtaa	caccaagctt	aactttcctt	gatcgatgct	gctttttactc	aaacctggaa	30480
gagatggtaa	tattttaatt	aatcagtgag	aaaagaaaaa	ctgatgtgaa	cgggacaatt	30540
tgcacgatgg	gggaataata	atattatttg	ggttgggttt	tgtaaaatac	tcctacttgc	30600
tttgtctttt	ttctcgacca	catgaccaa	tcgagctgtc	acaactcgca	cgtccataaa	30660
ttaagaatat	tatgctaata	cagttgacat	tcgacggcag	ctagcaagac	ggagtagctc	30720
accaaatact	attgctatat	atctaattca	accagcttgg	ataaatgggtg	agctgaatgc	30780
ttgctcaaac	actcagactc	accaaccata	ttatcatgtg	gctgtctatc	cagatttgtca	30840
agatttttgt	catgtgatat	atgatatact	tataatgcat	gcatgccttt	ttaatgaata	30900
gttcaatttc	ttacttttag	aggccaattt	gttggtttgt	agtgggtcaat	ctaaaattaa	30960
atctaagata	actttgtatg	gatggatgag	tagatttttt	ttaactaaaa	tgtgaaattg	31020
atgtcaaatt	tgcataataa	gttgccgttc	caacgaatag	cactagttaa	acacaatatt	31080
tcgtgaatgc	atgatgtttg	aaaatgatga	aggtaaaaaa	taagttgacg	cacgtaaaaa	31140
aagaaagtca	ttagtgtata	attaattaa	ttttaattat	tataaatttg	ataaatggat	31200
atatatgata	ttttaagta	agttctataa	tataaagttt	ttgcacggaa	tgtacatata	31260
gtagttttga	taagtgtcaa	tgataaccga	gctaaactct	ataactctaa	tcatagaaac	31320
tcatgtgcta	ttcagccagt	ttagtcttac	cacgttcggt	tggagaacaa	aggagtgaag	31380
ttttttcggt	ttccgcgcgc	acgctttccg	agctattaaa	cgggtgcgtt	tttacaacaa	31440
ttttctatag	aaaaattact	ttaaaaatca	tattaatcta	tttttgaagt	ttaaaatagt	31500
taataactca	ttaatcatgc	gctaattggc	cacatcggtt	tacgtatctt	cccaatcttc	31560
tcctcactca	caaataaaaa	accaaaccat	gaagttagta	tacctcaact	aattaggttc	31620
ctgatagtga	aacctatcca	tcagatttta	agttttaaaa	ttagcacggg	tgcttgtatt	31680
tacgagtagt	tattctacca	accaagttgt	agacttgata	cagtcgagtt	ctacacttcg	31740
catatcttaa	gatagtgcgg	attagtcttc	gaaagtactt	atagaggtag	ggtgtcttag	31800
acatatatcc	gtctagtctt	tgaaaatggt	tatagggatg	gagtgtgtat	atgtgtacat	31860
tcataagagt	gagagtacgc	gtgtttatat	cagctgcgac	tgtactatat	tttaaaaaaa	31920
ctaataatgc	ctcatctaac	gaactaaacc	taccagagag	gggaggagga	atggtaggaa	31980
cactaaaaac	cgaaaacttt	tagcggaaat	aaaagttacc	ttcgaagctg	atggagatcg	32040
gtctgaccgg	cttgatggcc	ctagtgtgac	cgcgccttgt	tgccaatcta	accggtgtag	32100
atcgaagctg	gaccgccttc	cgcgcctatc	acgcttgttg	ccgccatata	actgcccgtg	32160
tgaccgagca	gttgccctctg	gtctgatcgc	tggtgatcta	tcggtgtgat	cgttgcattt	32220
gagcaaaaca	caaattaaaa	gatgtcttga	aagtacgtag	attgaatttt	attgcttata	32280
ttcgtgttac	aaagtacaac	aacaacactt	ctctcacaaa	attcgactaa	actcgaaacc	32340
ttaacttttc	tctaaattaa	actctcccaa	aatcaataca	aggatatctc	aactccctct	32400
ctattttata	ccaaggcaag	cagcctaagt	cacgaatcta	atttgtacaa	gaagttctaa	32460
ttcactagaa	aaccttcccg	tacaagaaac	aaacttatct	catcataatt	cgaatttcaa	32520
tcctcccaaa	tttagactcc	ttccaagttt	gactccgctt	ttcatacgca	cacaatctcc	32580
cattgaaacg	gtcaattagg	cctagagggg	gggtgaatgg	gctaatttaa	aaacttaagt	32640
aaatgcagaa	gcagggtttt	tcagaaatcc	tgaaaatgct	ttacgaaaat	tctgaaaatc	32700
acagaatatg	cacaagtga	agtaaatctt	agatctagct	acatacaaca	atgaaatata	32760
agcacaaaac	acaactagac	ttataacggt	acaacaagc	aaagctagag	gagggagaga	32820
ggtatatcac	cgaggttggt	gcaataagag	ttgttcccga	agtttgaaat	cttaagggga	32880
ttatactttc	cgttgaggag	ctcacaaacg	gctgggtctt	tgctaaccct	ttctcagg	32940
ggttgcccac	agcactcctc	cttccactag	tggtatctag	gggtaaaaac	aattggaaac	33000
gatcggaaac	gttagcatct	cttcggaaac	gatgctcgat	cggctgggtt	gtcctcacat	33060
atactcaaac	gaaaatgtta	gtcctctcta	atcatattgt	tattaatcac	taaaatcatt	33120
aggggcctag	atgcactttc	acccatttta	tcgcacaaa	aatcatcata	aaacaatgtg	33180
cattgttctt	tagctaagc	atcccgtatg	atattctgat	tgtccagaca	tcattcttct	33240
ccaagtgtgac	tctcgatcca	tcaccgacaa	cgtctcctcg	aggcatcaag	acacacttac	33300
acaggaatca	aaacaagaaa	ccatatccga	gcacaagttc	tttcctaact	tgactcgaca	33360
ttagcaaaac	acaatattac	acacatatag	aaataatcta	gaagtcataa	ttatgagata	33420
aacacgagta	tccaaataaa	caactcaaaa	ccaaccctaa	tcaagatcca	gccgggtctc	33480
ctgcacatac	cacaccggtc	tgcccggcct	tactgggtaca	gtctgatcga	cttcacacaa	33540
aaaaaacact	tcaccaataa	tcaccaaata	ctaaattaat	tatatatcat	gccaatgtgt	33600
catcacaaat	taataataaa	aacacacttt	gatttcaaca	attagttaac	tgacagtcac	33660
atcgatatat	agcaaatatc	ggcaataatt	gcacaagctc	cctacatcta	ttctcttagg	33720
ttctcctaga	tcgatcacac	tggtctactc	ctttcatccc	ataaaataca	aacgttatcc	33780
caaatgttag	acaccgtaat	actacaaatc	tgagagggcg	tgattaataa	tttctcatca	33840
accatagggg	taataataat	ccaaggctgt	gtttagttcc	acgtaaaaat	tgaaagtgtg	33900
aagaaattgg	aacgatgtga	agaaaaagtt	agaagtttgt	gtgtgtaaaa	aagttcaatg	33960
tgacgaaaaa	gttgaaattt	tgaagaaaaa	agtttgacta	aacaaggctt	agtcattggtg	34020
atggtaagtc	agcccttaag	ctttcacttt	gacctattct	actctcacac	tgacgttgac	34080
attgtatcac	agggcaccac	ccatcccctc	cttaattttt	gtttgactat	agtaaccata	34140

tcaatcaaat	aggtgtgaaa	gctaaccctag	attatctctg	atcacactga	tcacattctc	34200
actagctatt	ctacactttc	taccttcaca	taggacgaca	agtgtacca	cctactgata	34260
aattatcaag	cctcatTTTT	cttataagtt	atggccaaaa	ttaaaatttt	aaaaattagt	34320
tttaaattat	tttgatgttg	tttcatcacc	tttttctagc	tttagctaaa	atgatataat	34380
tatagagaaa	ataaaagtca	taacctaaaa	ataaatttta	gtcatttttt	tatagcttat	34440
tagccgcaga	ctattcaact	cgaccctccg	tgttttctca	tataagccca	tacctggct	34500
acgtttgaaa	ctacaactct	acaagttctc	atattttatt	ttcttatttt	tcacaagtac	34560
gtttttgaaa	ctgtaaaacg	acgtgtgttt	ctaaaatttt	ctatagaaaa	attactttta	34620
aacatcatat	aaattttatt	taattttttt	aactaatact	acctctatcc	tagaaagact	34680
gcagttttgc	actattcata	tccaacgttt	gaccgtccgt	tttatttgaa	agttttttat	34740
aattagttatt	tttattgata	ttaaattgata	aattatgaat	aatactttat	gtgtgactat	34800
tttttatttt	tttaataaat	tttcaacaaa	gcgggacgtg	gttagtattt	ttgtgttat	34860
tagatgataa	attatgaata	atactttatg	tgtagactatt	ttttttaaat	ttttttataa	34920
attttcaaat	aagacagaca	gacaaacgtt	gcacaccaa	atttataatt	cataactaca	34980
gtcaaaatgg	gacggaggtg	gtaattaatt	aacctgtgtc	taataaacct	ctttttgtag	35040
aagaaatgag	aagttcgaac	acaacccgca	cacccaaacc	aaggggggtg	ttagattgag	35100
gggtgtaaa	ttttggcgtg	tcacattgga	tattatata	gatgttgcat	aggggtgttc	35160
gacactaata	aaaaaaatct	aattacataa	tccgtcagta	aaccgtgaga	cggacttatt	35220
aagcctaatt	aatccgtcat	tagcacatgt	ttactgtaac	accgtattat	caaatcatgt	35280
agcaattagg	cttaaaaaat	tcgactcgca	aattagtaac	aatttataca	attagctatt	35340
tttttagccta	tatttaatat	attatacaga	tgtccaaact	ttcaacacga	tctaaaattt	35400
tcgggttaggc	tcatcgaaag	caaacaaaac	gaacccccgc	acacgaacgg	tcacacgctg	35460
atctttttatc	caaaccctaaa	aaagaaaaga	aaatcagaaa	aagtcccgcc	actacctcta	35520
ctactgcggg	ccctaccctcc	acagattcca	ggcgccagct	aagcacacac	cgacgtgcac	35580
ccctccctctc	ccgcatgcgt	ttccactctg	tctccgctcc	acaccgagc	ccggtcaaac	35640
ccaaccccg	cgcgccgtca	ctccgcaccc	gactcactgg	ccccaccac	ccaccaccgc	35700
cgctgccccg	tgggccccgc	ccccaccgc	cgacgcgtgg	gccccacac	gccgccggcc	35760
gcggcggggtc	acatgcgcgt	agtcctaaact	ccgagcgcg	cacgaaaaag	agagagacaa	35820
aaaaaaaaaga	aaagagaaat	tcttttttagg	cgctctaggt	ataaaaatct	actcctactc	35880
atcacctact	tttccacttc	gattcctctc	ccctccccc	tcctcttctc	cctccgcttc	35940
ctccctctctc	tctcctctcc	tctccgcgcg	tgccgtgct	gctgcgtgct	cctctcatcc	36000
ccgtctcttc	ccctccgcg	cgccgccac	tcgctgggag	gaggaggaag	aggagacctt	36060
ccccggaatt	cgtgctcgcc	ggatcgggct	cgccgcaatc	catgtcgggtg	agtgggtgctg	36120
ttgatgtgtt	tcttttttct	actgatttta	gagttgggtg	ttggttgccg	tgtctagatc	36180
gagctgaccc	gcctgcgcgt	tggattgtat	tgattagagg	aagggagggt	gattagcacg	36240
aggtgtggga	aaaattagtt	gtaaaaaaa	ttggagggggt	taatagatgg	gcgtttgtta	36300
agtgacgtaa	ggcgaagtgt	atgttatgct	gttctgggtt	agtaagggtc	ttggcaatca	36360
gttttggtca	aatcttactg	gttcataggt	gttttggtcg	aatttcagct	tcagatgaag	36420
tttgtccctc	gtttccagga	ttattggcgg	tcagttcttc	atcgttaggc	ttttaattgg	36480
ttgaacagga	aattgggggtc	atggtagaat	gcgaagtttc	tgaaaacata	agtagagAAC	36540
aaaagtagga	gaattttgtc	aattaggtac	gatggaagg	caccgtcagc	ttgttcaact	36600
actgttaggt	tcaaaccttg	atcgtgcttg	agatttcttt	gctaaaataa	ggggatatgt	36660
ggcaaaaggga	gaataaacca	tgatatgatt	tttgttactg	actatagtgg	ctgtaaatga	36720
gaacttggtg	aatcacagaa	agttccaaaa	aacaatgcag	aaattgtatc	ctttttgtgt	36780
ctttgcctag	tccattttct	gacttctgag	atgaggtccc	cgcacacac	agaactgcag	36840
ttgcaattca	atgcattcat	gcaacaaaca	gacagactac	tgtcctataa	catgagttat	36900
gacttacgag	tagccttgca	tattgtacat	gcataagcca	aagctgcttg	tttattgtaa	36960
accagatgct	ctgtaccata	aaaaccataa	tccattaagt	tttcttggtt	actttgttga	37020
acattatact	agatacctat	ggtgttgact	gttacataac	attctgttca	ccatttgcca	37080
attttccccc	cttagtgaca	ttcattcttt	tgagatttca	gtcatgcctt	ccacatgaca	37140
aaatgttcca	ttcaactatg	atgtttggaa	ttgggaaacg	gtacacatac	ttaatgtttc	37200
ttttactaat	tctgattgaa	agaatgcaac	acatctttta	atccacatgt	acatacatca	37260
atcaatgctt	tgagagaggt	gcatcatgga	tcaatcatat	tgatgggttt	tagtaaacat	37320
tttacagcaa	ttatttgtgc	acatggccct	catacaattt	ttgttgggca	ttcaaccctt	37380
gttttgaggt	gttaaaaaa	ttatttttta	ttatgttgtc	aaattgcttg	acctttgtat	37440
tggtgggtgg	gcactctagc	gtgcactgtc	aataactcct	ggcggtgctc	ctctttttcc	37500
tggtgtgtga	acttccaatc	tgaccattca	ttatgttcat	atcttgtaca	catgtgtgtg	37560
gatgtcaatt	gctgtccatt	gtatgttact	atattttact	tagcattgtt	caactgtaat	37620
agacagtgat	atatcataca	tgtcaaatga	aaccaacaca	gacaaagcat	atgctgtgtt	37680
gtcatcttct	tatttcttgt	actgttctgt	tctgtcttga	aggtttagctg	tgtttagtcat	37740
ggccactat	ggattctcaa	aaggcatcct	ttatgttcat	tagtttcatc	tttttctatt	37800
ttccaatttt	attagatggc	tatactcgac	tttgttcaca	cataatctct	aattatcaat	37860
cgtctgggtca	tgcttggcag	gcctcaatca	aatgccagcc	caccacggg	aaatgggcca	37920

ggattgaggc	ctgctgaaca	aggtgtagag	gtagatacac	cctttaatgt	ggatcatggt	37980
tcctttctag	gaggaagcag	gtcgtcccct	gcccagttt	ggtgaatggg	atgtcaacga	38040
cccagcgccc	gctgatggat	tcacagtgat	attcaacaaa	gccagagatg	agaaaaaggg	38100
tggggaatggg	caagataactg	attcaccctg	caaagaaact	aggactgaga	gggtggaatc	38160
atatgcccc	aagacaaact	cggtatgtct	attacattac	tcacgcttat	tataatatca	38220
gaatttcaat	ttctccctga	ttaatataac	gatattcctt	ttctcttgaa	ctacataact	38280
agctagatgt	cattaatctc	attgttttca	tgtgcagaag	aaatggtttt	gctgcgtgac	38340
atccagtcct	acacaatctt	gatgaaaacg	agttccatgg	gttgcaaaat	tactatcctt	38400
taattttgct	atatacatat	tatccataag	accttgtaga	gatgcccgag	ctctactgcg	38460
gtgctagatt	gggcatctct	taaaactttg	aggtgtgtgt	atgtatgtgt	gagggttatc	38520
agatgcacat	tcggataaat	gaacttctga	ttgtaatctt	agccttccgt	cctgtgacat	38580
tctgtgatgt	agtcgttatt	cagtgatata	atgaatctca	cctatttata	taactgcaca	38640
ctgtttctct	tgctttccga	ggaaacaaac	actgttttac	caaagtggc	tgtgctccaa	38700
aagaggatta	aattccatat	gatttctata	ttgcaattgc	aattttgatt	ctctcaccta	38760
ctaatatgcg	atthttggaat	tttcctcacg	tgccaaattt	gcataattgca	atthttgataa	38820
aggatacaag	cacagtatag	ctcaatctcc	ttggcgatgg	aagttttctt	aatattgtag	38880
gcaccacatt	tctagctgat	aatgcaacta	tcgtggagat	cataaagagg	aggaattttg	38940
tggaagaagg	acctggaggt	tgggagtctt	cggcctctac	tcagtcaaat	acaagaaaat	39000
attcctcaaa	acttaatgca	tgtgatgtag	attcaaaaag	aggtgaatca	actagctgat	39060
aaggtagcaa	aggatgtgag	atcgcgacag	ctaaatcctt	caggtttatg	attgtcaaaa	39120
tatcttgagt	cttgctcatc	ctagaaacct	ttgttatgtt	agagatttga	agaaccattt	39180
cagagcaacg	aattgtatta	caactttaca	agtcagtgtc	tctgtttctg	aaatggaaat	39240
aaaactgatg	agttctaaaa	aaaaaagatc	catacatcca	tgctgtaca	cggacagcaa	39300
atctacatgt	caaagtggat	atcgccaaat	tggtttcaga	atttcatcat	tgtgctcatg	39360
cccaatatth	tttaattttc	ggtgaggaac	agatgagcat	ctttcgtgct	agctgcagac	39420
tcgggtgcac	taggaatttc	actggtttat	ttcacacgat	ttatttcagt	tccactgaaa	39480
tttgtttgga	attcatttgg	ttcgagaaga	ggcgtgagat	acgagacttt	gggagaggga	39540
aagggcagtt	caatacctga	tacttttgct	cacttggagc	ttgaccggag	agaggggagg	39600
gagagttagt	aggggggagc	agtcgatggc	ggcgagagac	gtggtgagca	tggcgatgtc	39660
gggtgctggg	cgcgccgtcg	ggaaggccgc	ctccgcccgc	gccgacgagg	ccaccctcct	39720
gctcggcatc	cagaaggaga	tctggtatgt	gtgcgcacgc	ttctgtaact	ccataaccaca	39780
tcggtgactc	tccatggccc	ctccgcccgc	gcgtgtcggc	gacctcggct	tccatggccg	39840
ccgccgccgc	cgcctcacag	ccctgcttcg	ccgcaatttc	ttttttggtc	ttttggtgat	39900
tccaacggat	tcaggatcaa	aaatgaaaca	atccggagag	cctattcacg	cttcgcattt	39960
cactacccca	aacttgtgga	ttgtgacct	gcaaaccaaa	attccttcag	tttcatactt	40020
tcatatgctc	aaatttccgt	tgttttcata	gaaacaaggt	tatttatccc	acttacatct	40080
tgcaaaaacc	aaagtacagt	tactcttata	gattttcatc	tatacacatg	ctagacgaat	40140
gcattgtagt	ccaattcaaa	tttctgatat	attagt tact	aaccaagatg	ctcccatgcc	40200
atgagcgcaa	gttccattga	caaggaaaaa	cactttttta	tgatttgagc	aagttccacg	40260
ctggcgtcct	cgttggcaca	ccacgtaagc	taaaagtgga	aaaaaaaaaa	gaatttttct	40320
ctctacagt	agtcagtga	aaaaacttaa	gtgcaaaatt	aaaatgggta	tttggaataa	40380
cgccaaatct	aaaagtggca	aatagttaaa	ttcccctttt	atattttctt	cttcagtggc	40440
aaaaacttaa	gtgcaaaaact	aaaatgggta	tttggaataa	cgccaaatct	aacagtggca	40500
aaaagttaa	ttcccctttt	atattagtcc	ttgaggagct	acggcaatgt	ttgctagcac	40560
cggacaagat	catccaataa	aaacttagag	attatacata	acagtgtcac	tgttactagc	40620
aaaattttcc	atcctattgc	atggttagta	catttttttt	ttgtgagaaa	tatatggtca	40680
atgccatttg	caatatacct	ccaggctcta	gtcaatataa	gactacatac	atatgcgac	40740
tacattttgt	actaggtctc	taccaaagaa	aggggtttgt	atccttctgt	tctcttaaat	40800
taatgagacg	atthtttagga	tctttctttt	tcaagggttt	gtgggagttc	tgactctcat	40860
ggctaacgag	gcgctctgaa	tactagttagt	ttatttccat	ccatctattt	atthattttta	40920
ataaattttta	ttgcttttga	atthtatatt	gtaggtacat	caaggacgag	ctgaaaaacta	40980
ttcaggcatt	cttaagagct	gctgaagtaa	caaagaagaa	agatgacttg	ctaaaggtat	41040
gggcagagca	agtacgagat	ctgtcatata	acattgaaga	ttgcctagac	gaattcaagg	41100
ttcatgttga	gagccaaagc	ttggcaaagc	aactaatgaa	gcttggtgaa	cgccatcgaa	41160
ttgtgtgaca	gattcgcaac	ttaaaatcaa	gaattgaaga	agtgaagca	aggaatacac	41220
gctacagctt	aatcaagccc	atttccctta	taaccacaga	ggatgagagg	gattcctacc	41280
tagaagatgc	tcgcaatcga	tcaggtagca	acactgacga	gtcagaactt	gtgggctttg	41340
ccaagactaa	agatgagttg	cttaaaactga	tagatgtcaa	tactaatgac	ggtccagcta	41400
aagtgatatg	tgtggttggt	atgggtggat	taggcaagac	tacccttgca	aggaaggcat	41460
atgaaaacaa	ggaacacatg	aagaacttct	cgtgttgtgc	ttggatcact	gtgtctcagt	41520
catttgacag	gaaagaaatt	ctgaaacaaa	gtatcaggca	acttctgggt	gctgattcat	41580
tagacaaact	cttgaaagaa	tttagtgaga	agttgctcgt	gcaagtcag	catctcgctg	41640
atcacttggg	tgaagggcta	aaggagaaaa	ggtactttgt	tgctcttgat	gacctatgga	41700

ccatagatgc	atggaattgg	attcatgata	ttgcttttcc	gaagattaac	aacagaggta	41760
gtcgcataat	aataacaacg	cgagatgctg	gcttagctgg	aaggtgtacc	tctgaatcac	41820
ttattttacca	ccttgaaccg	ttacatatag	atgatgctat	acacttgcta	ctagcaaaaga	41880
caaacataag	acttgaagac	atggaaaatg	atgaggactt	gggcagcata	gttacaaaaat	41940
tggtgaaaag	gtgtggttat	ttaccgctgg	ctatactcac	aataggaggc	attcttgcta	42000
ctaagaagat	aatggagtgg	ggaaaatttt	acagagaact	tccttcagag	cttgagagca	42060
atccaagcct	agaagccatg	aggaggatgg	tgaccctaag	ctacaatcac	ttaccatctc	42120
atcttaaacc	atgcttttctt	tacctaagta	ttttccctga	agattttgaa	attcaaagag	42180
ggcgccctgg	agatagatgg	atagcagagg	gttttgtcag	agccacagat	ggggtgaaca	42240
ttgaggatgt	tggaaatagt	cacttttaatg	agcttatcaa	cagaagtctg	attcagccct	42300
caaaagttag	tacagatgga	gttgtaaaga	gatgtcgaat	ccatgatatc	atgcgtgata	42360
tcatagtttc	aattttctaga	gaggaaaatt	ttgtgctgtt	gactaggagg	aagatcactg	42420
ttgtagcggg	ggagagcatc	cgccatctag	catttctatg	gagcaaatgc	tcaaagatat	42480
gcttggagtg	gaaccatctg	cgctcagtaa	ctttgtttgg	cgacagacct	gtggggcgaa	42540
cacctgcact	ttgttcacca	caatttagga	tgctgagagt	gttggatctg	gaagatgcaa	42600
aattcaaatt	cacacaaaat	gatatcagaa	atataggggt	gttgcgccac	atgaaatatt	42660
tgaatttttg	aagagcctca	actatttata	cacttccaag	gtccatagga	aaattgcagt	42720
gcttgcaaat	tttgaacatg	agggaggcaa	atatctcagc	actaacaact	gaggtgacta	42780
aactccagaa	tctccgtagc	ctccgatgca	gcaggaggtc	tggttctggg	tacttttagca	42840
taatagataa	tcccaaggaa	tgcttgatga	tcaccatgtg	cttaccgatg	gttttcttaa	42900
cttcaataaa	tttcagtgac	cggtgtgaagt	taattcctga	gatatgcatg	tcatgttcta	42960
cccgttggtc	tgatacaaag	gggtgtgagg	tgccaagagg	aattgacaac	ctaaaagagt	43020
tacagattct	agaagtcgtg	gacatcaaca	gaactagtag	gaaggcgatt	gaagagctgg	43080
gggagctaatt	tcagtttaaga	aaattaagcg	tgacaacaaa	aggcgccaca	aataagaagt	43140
atcagatatt	ttgtgcagcg	attgagaagc	tctcttctct	gcaatctctc	cggtgtggatg	43200
ctgagggatt	ctcagatact	ggaacacttg	agtgggtcaa	ttcgattgca	tgctctctct	43260
cattcttgaa	gagactcaag	ttgaatggat	ctcttcgaga	tacaccaaac	tggtttggga	43320
accttaagca	gctgggtgaag	atgtgcttat	ccagatgtgg	gctaaaagat	ggtaaaacta	43380
tggagatact	tggggcactg	cccaacctta	tggttcttcg	tctttatcgc	aacgcataatg	43440
ctgacgagaa	aatgacattc	agaaggggaa	ctttcccaaa	tctcaggtgt	cttgatatatt	43500
acttgctgaa	gcaacttaga	gagataagat	ttgaggaggg	cacctcgcca	acgatggaaa	43560
gtatagaaat	ttatggttgc	agggttgaat	cagggttat	tggtatcaag	caccttccaa	43620
gacttaagat	tatttcgctt	gaatatgatg	gtaaagtcgc	gaagcttgat	gtgctgcaag	43680
aggaagtga	tacacacccc	aatcatactg	aattgcaaat	ggcagaggat	cgaagtcatc	43740
atgacctagg	aggatatata	ggatctaata	tagtatgtga	gcaatgaaaa	tcgcatattg	43800
agcttggcat	tgacagatca	tggtcctgac	caggccttgc	atctgatggc	gatgatgcc	43860
atgacaatcc	agcgttgcgc	tatcaaaccat	catgttgaca	acaaagagtt	cagtcttgca	43920
cttgagaacc	taccctgtta	ttatgtaatg	acacgtttat	atgcattgag	atgaaaaata	43980
gacttaaata	accatataat	gcaacaccca	aagagaagag	aaatacaata	tagacttatt	44040
ttccagccat	ttgaacacag	cccacaatga	gggatggaaa	atatacttat	tctgtggaga	44100
agtacgatgg	gctatcgtgc	ctttgggtcg	gcccagagtcg	tattagccgt	gcctgggccg	44160
tgtgtgcagc	atggttggcg	ggccgtgccc	gcccgactaa	ccttggccca	ggtacgactg	44220
ggcttggggc	gtgccatgcc	gggcagccca	tttggctaac	tatactacac	tatatggtac	44280
tccctccgtt	tcatattata	aatcatttgt	cttttttcat	agtcaaaact	atttaaat	44340
gatcaagttt	ataacaaaat	atagtaatat	tttcaacaca	aaacaaatat	tgtatcaaaa	44400
tatattcaat	gttaaatcta	atgaaactaa	tttgggtgctg	tgaatgttgc	taattttttc	44460
tataaatttg	gttaaacata	aataatttta	actataaaaa	agtcaaatga	cttgtaatat	44520
aaaatggaag	gagtagtagc	tactcgtctg	ttaaaaaaaa	aagtttctct	ctaacataag	44580
agcaaatgg	ctcgacacaa	ttcacctgct	atttatctgt	ctttcgcctt	gtaaggtagt	44640
ggtgcaggac	tgcaaggtgca	gcattgcgtac	acaattgatc	tgtttttact	tcttgcaatg	44700
agataagatg	gagaacgttg	tgtcagtcac	tacatcttaa	actgcctgat	gctcatccaa	44760
aatgagaaag	atgttccaaa	ttacacattg	tgcatccga	tatgaatgat	ttctcactct	44820
atatatactc	tagatgttca	gatttttact	aagaattgag	gtgggttagt	gaatggagat	44880
atttttctag	ttcgggtgctt	tagatatgtt	ttgcttttgc	ctaatagacta	ttttttttgt	44940
tttattaaag	tactgtatata	tacttacggg	tataacgggt	atagatgaat	atagttcttg	45000
tttattatag	ctcttctgaa	aagtgcagtg	tacaactagt	tgtgttattg	ttactgata	45060
aaacatagaa	atgttgattt	aatgagctac	attgatctct	tcttcgttga	tatgagaagc	45120
ttggtttgag	ttgtttttat	attctaataa	atatttggtta	ctggaatcgc	tccattttcg	45180
tatttgaaaa	tatttgatta	tgttttttat	gtgggggttc	tgattccaat	taaaaaaatg	45240
aaaataaaaa	tggtatgatg	gtttccggtc	gttatgcatg	cgcggaacaa	tgatctcac	45300
taatcaagtc	gcacgcagtt	ctttatatct	tgttgattat	ggcttgtgaa	gcatagattc	45360
accgaattaa	ttgggatgct	aaattagtca	catgcatacc	caagcttgca	tatgacgtta	45420
tgtagataga	gatggccaat	ataatgcgct	ggaaagtcca	aagtaggat	gcaaacatc	45480

ttatagtggg	tagtggagcc	atgcaaggac	ctgggtctaaa	gcgcaccta	accgtcatgt	45540
ggactgccat	tatagttaaa	gttaggggga	atatgattct	cttcatgtgc	acctaaactt	45600
taatattgag	tgaacgaac	gctatgat	gatgataagc	ttaattcctc	tctctgctca	45660
gactgttcag	tgcaaaagct	accaacgagc	ttgtctcctt	gtgcggtcgt	gagcttgctt	45720
gtgctaagct	tgaagggaga	gtcgaacgaa	tccatggcgg	agacgggtgc	gagcatggcg	45780
aggtcgctgg	tgggcagtg	catcagcaag	gccgcctctg	ccgctgccaa	tgagacgagc	45840
ctcctgctcg	gcgtcgagaa	ggacatctgg	tacgtactgc	actgcgctct	cgtttatcct	45900
agctcggttg	tatcgacttc	cagcttaatc	tttttaataa	tgaataaaaa	cccggacttg	45960
ttatccataa	gtggatatac	acagtcaaaa	cacgcgacaa	gttcttaggc	tcttaattaa	46020
tctcgaaatt	gaggaacacc	atgaaacact	aaaagagagc	tcgaagacta	ggaaagaaaa	46080
ctagaagact	aagctttgaa	agtcttctaa	atccaagcat	ctcgacattg	atcatccttg	46140
tgcaacatca	acccttccta	ttgcttcacc	agaatcggcg	tcccttgctg	agatctctgt	46200
tgtaacgtca	aggggaaaat	cggagaagca	gaactagtc	gcgctgcctt	cgctacgcca	46260
tctccgcctt	agaggatctc	atccacgaaa	catccaccat	ccaaacggga	aacagtttta	46320
aacactcgctg	gacgttcacc	cgttcatcta	aatgggttatg	aaaaattttc	aaaaaaaata	46380
acatgatagg	ttaacatgta	atataatcatc	ttataaatat	gcaagttcaa	atttgatctt	46440
tacaagtgtg	aacaaaaata	acaaatttta	ctgtgaatat	acgtaaacta	gttaaagttt	46500
aatttgttat	ttttgttaca	acttgtagaa	gtcgaattta	aatctgtatg	tttgtgaaat	46560
gagatattac	atattaacct	atcttataat	tttttttaga	aatttttttag	aattatttag	46620
gtggcataca	agaaacggat	ggacatccac	aaagagatta	gtatccatct	ccacatccaa	46680
acccgttggt	gcaccatctg	tcgaatctgt	cgaatccggc	tgtggacgct	cggaggcaag	46740
agctagtcta	cccgtccacc	acacacaccc	aacgacgtca	caagcgctc	cgaacaacgc	46800
caactgataa	cttggcagct	cctacgtgcc	cagctcgccg	tacttgccgg	cgctcctagc	46860
gcactgaccg	tcgaaccaca	ccgtcaccga	ccagctaccc	accgcccgcc	acttctgcct	46920
catctgccat	cgctgcccta	gcccaagtta	tcactgtggc	aattgcccag	gctcctaagt	46980
gtgccacggc	cgaggcaaa	ttctaactga	atcagacagc	caccaccgac	acttctgctt	47040
catctgccat	cgcggtacta	gttcaagtgt	tcgctgtggc	aatcactgtt	gttattgccg	47100
cgccctgacc	cctatcgctg	tcgctcttag	cgcgtcgctg	agccgaccag	ccactgtcgt	47160
gcagatgaaa	aaaaaaaaaa	cattttggcc	tgagagatct	gcttagttcc	attgcaggct	47220
caacatgctg	tgagatgcgg	gcgtgccagt	cagtttgatc	ttgcaactga	caagatatat	47280
aaacagcaga	taaaacagcc	tatcgactaa	caagccgatg	gagtaattcc	agccgatagc	47340
cgatattagc	cgatgccgat	tctagccgat	gtcgatagg	ttttgaacta	tcggctatat	47400
gtccaatgta	ggcaatgata	taaagacaat	tggctgatga	taataaaaata	taaaaatata	47460
atccaataga	aaccaatcgg	ctaataataa	gtattgatcc	gatagttaaa	gcatacatcg	47520
gctaataagtc	cgatgctata	aaatccaatc	gatttagata	aacagtga	cctttgttgc	47580
aatcggctaa	atccaacttg	tatgtaatct	tcgtaagccg	atgaacgtcc	agataactta	47640
tcggctagca	cctcgataaa	acactagcat	gaacctatcg	gcttaacaag	atttatatta	47700
tcaacaacaa	tctagtaggt	cggacctaac	cgatgcaaca	cgtattagat	atgataatct	47760
aatactcgat	gagccaatag	atctgtctaa	tgtgatggat	ataacaaatc	tatttataaa	47820
agcattgcga	ttgtagagat	atatcggcta	agacagaata	tcagacctaa	ctaaaccgat	47880
gcgtctctata	acacaatgca	gataataattg	agatatcagc	agataactga	taggcaataa	47940
tatcaaccaa	actagagcga	tccaagagat	cggagcaatg	cagccttgaa	caacaccaat	48000
gtagccgatg	gattcaccag	ggctgacgga	atgtaggact	taccccttcc	ctgaagatcg	48060
ggctgaacca	atgcagtcct	atgtcaggtg	ccaaattccg	ccggttgata	agtaaaacct	48120
cagaaaagag	gatgacgatg	cgccgagagt	agtattgatc	gagagataaa	ttgcaatgac	48180
cctggatgta	catatttgta	cccattgggt	gatattagtt	ctttagtagc	aagaaagaaa	48240
ctttcctaaa	gataaaaatga	aaacataaag	tttttattgg	atactaaaca	cactttccta	48300
aagataaaa	gaaactaaac	cctgccta	taatagataa	actgccatgt	cgatcctcc	48360
ttgaactcga	actcttttag	ataagcttcc	tttaactaat	ctttaccgga	atccatcaag	48420
aatacaaatg	ttggcattga	tagttttcat	cggccaattc	taggactttg	aagccgatac	48480
tgactctaag	ccgatgacta	ctttgggctt	accaaatttt	gttggttaaca	tgtcgcgacc	48540
accatcaccg	gccagccacc	ctgatcattg	ttgttgactc	agcattcgcc	aggctgagca	48600
gtccacatac	atgccgccat	ctccatggca	ctgtcggtgc	cgcccttttc	tcctagagcc	48660
gccgcagcgc	tcttcgacac	acctaactga	tcgtcgagca	gtcgtgctac	cacctcctcc	48720
atcgaccata	gccgcctctt	ctgctgcacc	ggatccaccc	acaccaacca	ccagatacag	48780
tcaagccctc	attcccggat	cccatatcca	tccatgccac	tactgtgctg	cccagtccaa	48840
ggaatggagc	gaaggaggaa	gccccgccgc	tgccctcccg	gcggccacat	gcactccagt	48900
gccttgctcc	gacggcagcg	aggttgga	atgggtggca	gcggctaggg	tttatctggg	48960
gagaaggaaa	aggagaggga	gggggggggg	gagggtccac	ttccagctta	attagcctag	49020
atcttattga	caaatcagtt	gctgggtgca	caaacatgtt	attttttttg	catgaccaat	49080
cttgaacact	taggtatggt	agttgagtg	acactgggtc	atctgaaaca	tctcttcaca	49140
tggaggtctg	gaatgagttt	tctttttgag	agaccaaagg	ttcggtgtat	gttaagtgat	49200
aaagccttgg	taagaaatgc	taccacaaac	gaactaataa	ctccaaacgt	aaagtggagg	49260

aaccgcgtatg	ggtgactcga	gtggcgacaa	actctagcac	ctccacctcc	ttggacgggc	49320
tgcgcgcggtg	ctttcggcat	cccagtccttc	ttggaggcat	catctagaat	taaggtcttg	49380
ttattgctta	gcatgcctta	gggcacgtcc	agtgtttagt	tcgactaaaa	cttccatgaa	49440
agccaaacaa	aagttctgtt	tgaccaccac	agtgtaaaaa	tcgatttgtg	gaccatgca	49500
aaaaaaatca	caatctcagc	tgccctatgt	ctcctcctgg	acctgatagc	cgtgcacaac	49560
aaatatTTTT	ttaaactgga	tgtgttcggc	ttctctttaa	agatcgtttt	ttcctctgac	49620
acttaccac	cggctttcac	agtgtggtca	gttctttttt	tttttacgca	aagtttgatt	49680
ttagtccagac	acgggaggat	ctgttaagca	ggcttgga	tttcggaccc	ctccaatata	49740
atattatTTTT	agccaaaatt	ttctaatttt	ttaatttttc	atgaattttg	gtaatatTTG	49800
ttctaatttta	actaaatttt	gttcaaaatt	tcggctctatc	agtgcctcc	gatcaaatca	49860
gttaaaccga	gaaaataaac	catgctctta	agagagtttg	gtatggttca	atatcaaaa	49920
ttatagtctt	gcaatttttt	ctacccttta	ctcttttccc	tgactattta	gtatggatcg	49980
tttaaaaaaa	agaaagccca	ttggtgacca	agggcttgtt	tgattcaaga	ccatccctag	50040
ccttaccac	cttttgga	tggaaaaaat	tggttgttgc	caaaaatatt	ggcacaatt	50100
ggctaagcct	atgatttggt	tctaccaaag	ttgaattttg	gcattcaatc	aagccaaata	50160
atttggcaat	aacattttct	tatctatgga	tataacatat	ggcaaatatt	ttggcattac	50220
catTTTcttt	ttgccaaa	tgttattcct	tttgaatgac	caatcttgac	accttatgta	50280
tgttagtagt	ggaatcgaca	ctattctatc	taaaacatct	ctttacatag	aggccgcta	50340
taatttttct	ttgagataac	caaattttcc	ttacaagtta	agcaacaaag	ccatttggtta	50400
agatatgcta	cgacaaatga	actaataact	ccaaacataa	agcggaggat	cccgcatttc	50460
ccacgtgggt	gactcgagcg	gtgacaaaac	ctagtacctc	caccccttg	ggtgggttgt	50520
ggtggcactt	tcggcacctg	atTTTccttg	gacggatcat	ttagaaagtc	ctattattgc	50580
ctagtatgcc	ttgacagttt	aggcaacact	cttggatggg	ggtgtccttt	gccctgggtga	50640
tctagtatgcc	catggatggt	tagttatttg	gacatgggtg	tggtgggtgc	gctcgtgggc	50700
ctgttgtagg	tctggtgcca	accagtcag	cttagaata	gccggatagg	tgacagtg	50760
tagttcttta	cttgggtggt	tgtgcagcgc	tatcgacatg	tggtgggtg	ctttttcttt	50820
gtccggataa	taatctcata	gggctatact	cttgttattt	tgctgctata	ttattatgat	50880
aacttggtat	ggttcgTTTT	ttcttttttt	ggaaaaacac	ctagtgtgatc	aagggttgt	50940
ttggttcaag	tgcattccta	atcttacctt	ttcttttttt	tttcaatggc	aagaattggt	51000
cattgcaaaa	taaaaaagaga	taaaaattgg	ctaggcttac	gttttggttc	ttaccaaagt	51060
tgtactttga	gaccaaatat	atggcaaaat	tttggcataa	cctttttttt	tttgcttggt	51120
tgagcttggt	acaaaccaat	cagtcacaaa	atagactgtc	atgaatcacg	cctactaaat	51180
tcctttgaac	cgaactagaa	tatatTTgct	cttaaaagat	ttcttgattt	caattgggtac	51240
catttactag	tagaaactta	aatttaaaat	ttaaaaacaa	aatcataata	ttgttggttat	51300
ggaaatttta	gtcatttttag	taattttgta	atatatgagt	tgggttatac	ttgagatatc	51360
ctaaattgct	ttaagatgaa	caattgctag	gtatatcaaa	gatgagctaa	aaacaatgca	51420
ggcatttcctt	agagctgctg	aagttatgaa	aaagaaagat	gaactattaa	aggtttgggc	51480
agagcaaaata	cgtgacctgt	cgtatgacat	tgaagattcc	cttgatgaat	ttaaagtcca	51540
tattgaaagc	caaaccctat	ttcgtcagtt	ggtgaaactt	agagagcgcc	accggatcgc	51600
tatccgtatc	cacaacctca	aatcaagagt	tgaagaagtg	agtagcagga	acacacgcta	51660
caatttagtc	gagcctattt	cctccggcac	agaggatgac	atggattcct	atgcagaaga	51720
cattcgcaat	caatcagctc	gaaatgtgga	tgaagctgag	cttgttggtt	tttctgactc	51780
caagaaaagg	ctgcttgaaa	tgatcgatc	caatgcta	gatggctcgg	ccaaggtaat	51840
ctgtgttggt	gggatgggtg	gtttaggcaa	gacagctctt	tcgaggaaga	tccttgaaa	51900
cgaagaagac	attaggaaga	acttcccttg	caatgcttgg	attacagtgt	cacaatcatt	51960
tcacaggatt	gagctactta	aagatatgat	acgccaactt	cttgggtcca	gttctctgga	52020
tcaactcttg	catgaattgc	aagggaaggt	ggtgggtgcaa	gtacatcatc	tttctgagta	52080
cctgatagaa	gagctcaagg	agaagaggta	ctttgttgtt	ctagatgatc	tatggatttt	52140
acatgattgg	aattggataa	atgaaattgc	atttccctaag	aacaataaga	agggcagtcg	52200
aatagtaata	accactcgga	atgttgatct	agcggagaag	tgtgccacag	cctcactggt	52260
gtaccacctt	gatttcttgc	agatgaacga	tgccatttca	ttgctactga	gaaaaacaaa	52320
taaaaatcat	gaagacatgg	aatcaaataa	aaatatgcaa	aagatgggtg	aacgaattgt	52380
aaataaatgt	ggtcgtctac	cattagcaat	acttacaata	ggagctgtgc	ttgcaactaa	52440
acaggtgtca	gaatgggaga	aattctatga	acaacttcct	tcagaactag	aaataaacc	52500
aagcctggaa	gctttgagga	gaatgggtgac	cctagggttac	aaccacctac	catccatct	52560
gaaaccatgc	tttttgatatc	taagtattct	tctgaggat	tttgaatac	aaaggaatcg	52620
tctagtaggt	agatggatag	cagaaggggt	tgttagacca	aaggttgga	tgacgactaa	52680
ggatgtcgga	gaaagtact	ttaatgagct	aatcaaccga	agtatgattc	aacgatcaag	52740
agtgggcaca	gcaggaaaaa	ttaagacttg	tcgaatccat	gatattcatcc	gtgatatac	52800
agtttcaatc	tcgagacagg	aaaattttgt	attattacca	atgggagatg	gctctgattt	52860
agttcaggaa	aacactcgcc	acatagcatt	ccatgggagt	atgtcctgca	aaacaggatt	52920
ggattggagc	attattcgat	cattagctat	ttttgggtgac	agaccaaga	gtctagcaca	52980
tgcagtttgt	ccagatcaat	tgaggatggt	acgggtcctg	gatcttgaag	atgtgacatt	53040

cttaatcact	caaaaagatt	tcgaccgtat	tgcattgttg	tgccacttga	aatacttgag	53100
tattggatat	tcgtcatcca	tatattcact	tcccagatcc	attggtaaac	tacagggcct	53160
acagactttg	aacatgtcaa	gcacatacat	tgcagcacta	ccaagtgaga	tcagtaaaact	53220
ccaatgtctg	catactcttc	gttggtataag	agagcttgaa	tttgacaact	ttagtctaaa	53280
tcacccaatg	aagtgcataa	ctaacacaat	atgcctgcct	aaagtattca	cacctttagt	53340
tagtcgcgat	aatcgtgcaa	aacaaattgc	tgaatttcac	atggccacca	aaagtttctg	53400
gtctgaatca	ttcgggtgtga	aggtacccaa	aggaataggt	aagttgcgag	acttacaggt	53460
tctagagtat	gtagatatca	ggcggaccag	tagtagagca	atcaaagagc	tggggcagtt	53520
aagcaagttg	aggaaattag	ctgtgataac	aaaaggctcg	acaaaggaaa	aatgtaagat	53580
actttatgca	gccattgaga	agctctcttc	cctccaatct	ctctatatga	atgctgcggt	53640
attatcagat	cttgaaacac	ttgagtgcct	agattctatt	tcattctctc	ctccccact	53700
gaggacactc	gggttgaaatg	gaagtcttga	agagatgcct	aactggattg	agcagctcac	53760
tcacctgaag	aagttcaact	tatggagtag	taaactaaag	gaaggtaaaa	acatgctgat	53820
acttggggca	ctgcccaccc	tcatgttcct	ttctctttat	cataattctt	atcttgggga	53880
gaagctagta	ttcaaaacgg	gagcattccc	aaatcttaga	acacttgtag	ttttcaattt	53940
ggatcagcta	agagagatca	gatttgagga	cggcagctca	ccccagttgg	aaaagataga	54000
aatctcttgc	tgcagggttg	aatcagggat	tattgggtatc	attcaccttc	caaggctcaa	54060
ggagatttca	cttgaataca	aaagtaaagt	ggctaggctt	ggtcagctga	agggagaagt	54120
gaacacacac	ccaaatcgcc	ccgtgctgcg	aatggacagt	gaccgaaggg	atcacgacct	54180
gggggctgaa	gccgaaggat	cttctataga	agtgcacaca	gcagatcctg	ttcctgatgc	54240
ccaaggatca	gtcactgtag	cagtggagc	aacggatccc	cttcccagc	aggagggaga	54300
gagctcgcag	tcgcagggtga	tcacgttgac	gacgaatgat	aggtcagtc	ctccctacat	54360
ggcagcttaa	ttaacttggt	tctaattctc	ttcttggtca	gtattagcca	tcagggtgag	54420
gcgagtattt	caactcactt	ttcatctctc	tcgttttctt	aacctgacag	cgaagagata	54480
ggcacagctc	aagctggctg	acgatctcct	cccccatcag	cgtcgtcatc	agcgaacaga	54540
tagggcaggg	cttccctgct	tctgcgtgca	cctcacccgt	ctgactcgga	gggacatgat	54600
gatcaatgag	gcttccagtt	tccaaatgcg	tggctaacac	accaggttgt	ccctatccga	54660
ggtatgaatt	gatgatccaa	tttttttctt	tccggtgagg	ttcaaacatt	tgatgcttag	54720
tttcatgagg	gtattctgtg	tttcgggttg	tgatatgcat	aattactccc	agtttatggt	54780
ttgatgctga	gttttttatt	ctcttcttac	acgtgcactc	ttcattttcca	tttcattcaa	54840
aacagaaacc	aagttgattg	cattgtggag	gggaatatga	gacagaaaat	caaattggtta	54900
gttggtggtt	tcttatttctg	tttgctatgc	gcagttgcgc	accaaccgtt	tgtagaaatg	54960
tctgaaagag	cctatgtaca	tatggtggcc	tgaacattac	aagttatcat	attttatatt	55020
gttgctagct	ttcctttcaa	aaaaaaaaaa	attggtgcta	accgatcaca	tagtccagta	55080
gtccagtagt	aagatttttg	ttaagtttat	tgttactgaa	tatattgttt	ggcctgcagt	55140
tgttatttct	ctcaaaacaa	aattatttgg	tagtctcaag	tacaaaaaga	aagacagatc	55200
agacaagttg	ttttactcta	ctagtttcaa	attgatcatc	tctgtttggt	cttcattcat	55260
tttctttctg	taagagagtt	tgctaggatg	gtgatgtggt	catgtggatg	atcaaatgga	55320
ctacatcaga	cgcacacac	tgctgcccc	cctttaccca	ctgtagacaa	atggagtgca	55380
ggtcctaaac	caggccagaa	gtttgttcag	tgttcttggt	ccaaaataaa	cattctggat	55440
ggcaggttat	ttcattataa	cattcactct	tatagctttc	ttagtcaaaa	ctacaaataa	55500
ggtctcctaa	aaaatgcatc	gacgttgata	tctgtgtttt	ctgccatgca	gaatgacttg	55560
ctctcaatgg	ttgaagctgc	aatcctccat	gtcatttctt	ggctgaaccc	aaattggtgg	55620
cttggaggct	ggagctgcat	gacattagag	ataacaatgg	ccacttttgg	tgccatggg	55680
tgagggtaca	tggatcatgc	cgtgagcct	ctactccgag	caagcagaaa	actggctggc	55740
tgtagatcga	gttcgccatc	gccctcaact	ttgtcgatgc	gatggtgatc	atggatagat	55800
gtatgtcaca	tagcgcaaag	cggagcctcc	aatgttcgca	accgtactgt	aaatgtggga	55860
gcggcgaatt	tctcaagggg	acaaccatgg	aacagaggag	atggagcaaa	gtagttgctc	55920
ttgtatcat	ttcagagctc	aggctgatct	ctagctcaga	taggagtacg	aattcttatg	55980
tgtgtgtatt	tgatctatga	tagtacgttt	taagagttag	gccagatatt	gcttgatcat	56040
tacatgatga	tatgtaaaaa	atggtattga	caaggagacg	caggaacagg	gtggttcatt	56100
gctctgttta	atcttaatct	tggagagcta	ggatggaaaa	ctgagttggt	ggttatatct	56160
ctactacttt	tgatgttgtc	ccaaactaat	ttgtttctac	tcattgttct	acctaaaaaa	56220
ggaatatttt	agtgattaca	gaacttaatt	ttctctttta	tcagattatt	tatcagtggg	56280
atttttcttt	ctctagttct	gtatgaaaat	acttttttat	cgtcaatcct	cctaaaattt	56340
tgtgatatca	gtattttttt	tgttttactg	gaatgggctg	tttcagtgtc	gcttgcttgg	56400
acttgctgat	tcctccctct	ttcctattta	taaaactcatt	tttcttcagt	ttttttctct	56460
gtattttggt	tttctttcct	ctacgtgact	acacattttg	aatcgaacat	gctatgctct	56520
gtatatctgc	ttggaatact	tattaaatgc	ataggccggc	catttggaat	gagcacttaa	56580
cagttgtttg	aacacttcca	tggattttgt	tcctcagttg	tcggacggct	atttaaacct	56640
gattaagaat	tccatgtgca	gagacttgta	ctagcgtcga	agactttgct	tcggtgactc	56700
ggagtcaagt	caagccgggc	acagcgcaag	ccaataagct	tcgacgacga	cgacgacaac	56760
catgccgcgc	tattgcttgt	aaactttgtc	tacaaaagcc	agccgcgatg	ccatccatcc	56820

actccttccct	tccccattgt	tgtcagcca	ctcggcgctcg	gattttcctc	taccacacca	56880
gctctaccaa	cctttcccg	gattagagag	gaagaggagg	acgccgaagc	cgttgcatca	56940
agcccaggac	caccgtcgaa	cacctgctgt	gcgcaccgcc	cggcattcct	tcgcttcacc	57000
accgtgtgtg	cacagttccc	accatagtgt	gcaaagcagc	ataggtaagt	caactccgat	57060
tttctgctgt	tctttttttt	ttaagataaa	gcaggagttc	tgctattcaa	ttaagcatgg	57120
aagaattttt	gggtattttg	tgtatattct	ggccttgttt	agttctcaa	aatttttacc	57180
caaaaacatc	atatcgaatc	tttgacata	tgcatagacc	attaaatata	gataaaaaaa	57240
ctaattacat	aggaggtttt	tttccggtcc	ttgagggaag	gcagtaccat	atcctagccg	57300
ttgattttgc	atgatctaac	ggctggaaaa	cctcggtacc	gcgtggtacc	gcgtttctgt	57360
gagagtaggt	accgatcagt	ttttgaggtg	gaagggtatc	attgtaattt	cgcgtcactt	57420
atctcgatca	acctaaccgt	ggacgctgcc	ccttcgagct	cgctcgctcg	tggtgtatgc	57480
gacggcgggc	tgggcgtgac	ggcgatatgc	gacggcggga	tgcgacggca	gatgcggcag	57540
tgaggaggcg	gcggcctcga	tgcggcggcg	gccgcggcgc	gatggcggga	tgcatggcg	57600
ggcgacccaa	gccgagatga	cgatgacaac	aagcatgcga	gattgatcga	tgcgcccgcg	57660
gtgcgatggt	gggatgcgac	ggcgccggcc	gcagtgcgac	ggcgggcgac	ccaagctgag	57720
tgcgacggcg	gccgcgtccc	tcgtcggtcc	gcgggacgcg	gcgggctcga	gggggacggc	57780
gggtggtggt	ggacgcgcgg	cggcaggggc	ggctggacgc	ttgatggtgg	cgggcggtcg	57840
gatgcgggag	ggcgccggct	ggatgcgcga	ctgcgggtgg	cagctggatg	cacgatggcg	57900
gcggcggcct	cgattggcga	cgacgacggc	gtctggatg	ggcgacagtg	gcggccggcg	57960
ggatgcacga	cgccggcgcc	ggcgtcgatt	ggcgacgacg	acggtgggct	ggatggcgga	58020
cggcagcgcc	cgccgggatg	catgacggcg	gcggcgccct	cgattggcgt	cgacggcgac	58080
gggctcgatg	ccggcacgga	tggcctcgat	gccacatctg	tttttgtag	tccgatcata	58140
cccctactaa	atcaatgggc	agattagatt	ggtacctcat	ggtacctcct	caaggatggg	58200
aaagatgctc	ttgctatgaa	gaacctccga	gctcgggtcaa	tgtccgga	ataacttgga	58260
taactacaag	tggaagccat	ttttggttgg	ttttctgcat	gatctgttg	tccctgtttt	58320
attatatact	gtaaaactttt	cattgcgcag	tttgattaat	acatgtctat	ttgatattgc	58380
agataaatac	agttgtagcc	tgaaagatag	tacttacaat	ctattgcttg	aaagtctaaa	58440
gaaagtgtgt	cagagaagga	agatcagatg	gcggatacag	tactcagcat	tgcaaagtcc	58500
ctggtgggaa	gtgctgtaag	caaggttgct	tcggttgccg	cagacaagat	gatcatgctg	58560
ctgggagtg	agaaggagat	atggtgagca	tctgacttgc	agcctaatta	attttatttt	58620
cagttgcatt	agattttattg	ggaccacact	tatgcagagt	ggatgtgtac	tcagtttatt	58680
tttaatgatt	tattttatatt	tttataccat	gttctggagg	aatgcatatg	cagttttttc	58740
tataagtata	ttattttgcaa	catcttgggg	agataaatgt	agaggaaagt	gaaagtagaa	58800
tgacttgga	gtccctctat	atacccaaac	acaagtggac	atagttttct	cacggcaacc	58860
atgttcaatg	aaggaataca	aacgaggcag	ctattaagga	cctggtgata	atctaatttc	58920
gacagaaaca	tggttttcctt	cgagtgtaaa	caatgtagca	tggtcatgctt	aagtcaaagt	58980
catatacaat	ttgacaagga	actattagtt	tcagtgtctg	gtaattttgc	tttttgtagg	59040
atcgaaacaga	aataactaag	ccaaccagag	aggggggggg	gggggggtgaa	tagctgtagt	59100
accaaaaacc	aaaactttta	gcggaattaa	aggttaccct	tgaatcgata	aattccgatc	59160
tgaccgaagt	agatacgccg	gtctgaccgc	ttggatcccg	tcggtctgac	tggagtatat	59220
cgtccggtct	aaccgcccga	agaagctgaa	gtcggcgctg	gtctgaccgt	gtcacgcccg	59280
gaaattcact	agtaattttc	aaacttattt	gtgcataaaa	tcctcgtcca	ggaatcagcc	59340
gaggtacaca	aactgacaat	ttaatatata	cagatttcac	aaattaacta	59400	
aaacgataag	tacttactta	agaggcactt	agtcctcacc	atgaagaaaa	ctgcagcgga	59460
aaaataaaat	ctagtgaagc	tcgggtcca	ctccacagg	tagctcaact	ggggtataag	59520
ccaaacgtct	tctccttcgc	aacttgtctt	caactgaggt	tgatttggtta	ttgcaagggtg	59580
agcatatgac	atactcagca	agccacacag	caaatatgca	agtgcacaag	gataccaaaag	59640
gatggcataa	tataggctca	tttgcgaaag	cagcatttag	caaagagtta	agagttagtaa	59700
aacagtagag	taattaatca	gaaatttta	tcaacactga	acagcacacc	catgctgtac	59760
aggcccaacc	atcctgaaca	accatacccg	gctgtacaga	tctaactcca	aaccaggagc	59820
taagcaaatt	attaccaggt	ataagatcca	taattattgt	gagaggtgtg	agactaatca	59880
cgaaaaacat	tgctcaacc	gcccataacc	gcgggcacgg	ctattcgaat	agttttactc	59940
tggccagagg	tgtaccactg	taccacaag	acacagcccc	acatcatgtc	accatgtgcc	60000
tcagtaccac	cacggtacct	cggaaagggg	ctgtgacatt	acccctcgca	taacacaacc	60060
caccacagtg	cacctttcct	ggatcataat	caccctctca	aaaaccagag	gcatggactc	60120
cccagcgacc	cccgtgggct	tatctccgcc	acttctcagt	ctggtgctct	gcaatgaacc	60180
atgctatacg	aaaggtaaag	ccgttgccca	cgctggcttg	tggttggtcac	gattaatggt	60240
tcacaatagt	agctcgtgaa	ccggtcctta	attgtcatga	gcacgactct	caaaaccatg	60300
tgctcacaac	ccaccattat	caagttttag	ttggcaagta	attaattaac	caatcacgat	60360
tgaccatcgt	gaactatcat	taagccatca	ttaaataata	atgagtcata	agttatccca	60420
atagtgtgct	aatgtttcta	agcatggcta	agcaatcata	tctaatatct	agctgaacca	60480
atataatag	ctcaactagt	caagttataa	taacccaaga	tatcaaggaa	taaagtaatc	60540
aatgcaaaca	ggtcataaca	aagggaatagg	ttcacaccac	ccagtgcacat	tcgaaaataa	60600



atgcacagtt	aaaataaata	gagaatttaa	atataggatc	aacatgctca	aaggattgtg	60660
tttgggatct	gtgtgacttg	ccttgcaata	atcggtcttc	aattaatctt	cttgaacact	60720
tccgacgcac	tcgcaaacct	tcacaacgac	ggaacgcaca	agctaacacg	caaaaacaagg	60780
aaaaaactaa	taaaaaaccaa	ataaacaata	cataaaaaagt	aaacaaacat	gtagatcata	60840
tttttagatg	aattatgaga	cttgaaacggc	ctcattctga	cttcaaataga	atattattatg	60900
aattttacaa	gattaaatct	atttaaagcc	cttttaaaaa	gaattaaata	aatttaattc	60960
aattttatgga	caattttaat	atgtagatct	ttattttata	caaattttgc	aacttgaacc	61020
acattaaact	gagtttaagat	gaatttagtta	tgaatttttta	aagattaaat	cggattaaaa	61080
cacttatatt	gattttaatt	gaattatgac	gcaataatga	attatttttg	aaaaggaaaa	61140
ggaggattat	tgcgtcagcg	gctaggggtt	gcggtggacc	gggtgcacgg	cagcgggttc	61200
cggaaacgaa	cggccgagat	caaccctatc	caaaacggac	ggccgagatc	gatcgggtcca	61260
cgcacggctc	acgggagacg	gggacgatga	cgtcagcgat	gacgtcacca	ccggcggcgg	61320
cggctcggcg	gctcggacgc	gcacgctcgc	cggcgaacgg	cggcgcttcg	gcacgaacgg	61380
agggcaccac	cgggttagagg	gcgacgcggc	gaactcaccg	gtgaccaaag	aagcggcgga	61440
gaagcaacgg	acggcgacgg	cgacgagggt	gaagcggcgg	cggccttcgg	gtcaacggcg	61500
gcgatggtgc	tccggcgatc	ttcggcgacg	gcgaaggggc	ggacgaggac	ggcgacgcga	61560
cggcgaccac	gatgacgacc	ttcccgagcg	acggcgacga	ctggaacggc	ggcggcgcac	61620
ggctggagcg	acggcgacga	cggcggcgct	aggttacacg	gcgctagagc	gcttccgacg	61680
acgagagacg	aaggcgaggg	tggcggcggg	tagaggagac	accggggatc	cttttaaagg	61740
ggttggaggg	cgacggcgaa	ggccacggc	ggccggcgac	gagaaggaaa	gatcggggat	61800
tcggaggaaa	gagaggaaatc	cgattcgacc	tcgaatccac	aagtttccaa	accgaattag	61860
gcgatgattc	cataagagaa	aaggaagagg	agatcgagaa	gatcatttcc	cctctatcaa	61920
ttcggcctga	gaaggaaaagg	atcgaccgaa	ttttggaagg	agacggcggc	ggcgctcggc	61980
taggttttcg	ggcggcgggc	accgaaggag	gacgacgaaa	ctgacagacg	ggccccacct	62040
gtcagcgact	gagagagaga	agagagcggc	ggcgcggaact	aggccgactt	gggcccgaattg	62100
gccggggagg	gagaaaagga	aagagagagg	ttttgggccc	gctttcggcc	caaagccaaa	62160
agagactttt	aaaaaccttt	ttcaatttaa	attattcatg	aaatgcaatt	ccattttatta	62220
aaaatacttc	cttagctcaa	ataaatccca	gaaaaatcta	ggaattatag	aattaagcaa	62280
agtatttaac	aaaattttat	ctagcccaat	tttatgttga	gatttagcaa	attaaaaata	62340
gatcttctct	tctaggcttt	taaaatcatt	ttactaattt	ccttttaaac	aacaattttat	62400
aatttaagga	tttttttaaa	caagaaaagc	acttaacaaa	tataattaga	tcatcaatga	62460
tcaataaatt	actgaactgt	tctttgtatt	atttaagaat	tgagctctga	aaaatccgag	62520
aaaatttcag	agagtataat	taaccatgga	gaatttaaca	aaaattaaat	ccatccatgc	62580
tttatattta	ggaaatttta	tttcccacat	ttaacttcac	ttgtaaatta	atgaacattt	62640
aatataaatt	ctaataataa	tttattaatc	ctgaaacgaa	aatcaggatg	tgacagaccg	62700
cogtgtaccc	gctggtctga	ccgcgcgat	ttcgctgggt	tgaccgccag	tgtcccaccg	62760
gttagaccgc	cgaactcaag	taaatacaaa	ttgaagatct	ctcaaagtgg	atgacaactt	62820
tattgtctct	ctctatgttt	acaaagtgca	acaacagcac	tcctcacgaa	aatctcgact	62880
aaactcgaaa	ccctaactat	tctctcaact	caatactctc	taaagcgata	ccgggaggcc	62940
acaccctccc	tctctattta	tacatagggg	aggcagccta	aagccacaaa	tcaaactcat	63000
gcaagaagtc	ctaatacaca	taggaaaaat	tcccgtacaa	gaaaccaact	ttacaaaactc	63060
aaatcatacc	aaatttagac	tccttccaaa	tttgactcca	catcctatac	gcacacaata	63120
tttccattgt	atgccatag	taatcttcac	caaccacgtg	cattttattt	tagccctaagt	63180
atcccgcatg	atatctgacg	gtccggacgt	caccttatct	ccaagttgac	tcccgatcca	63240
tcgccgataa	tactctcccg	aggcatcaaa	acacctacac	atgaatcaaa	caaagaaacc	63300
atattccaag	accaagctat	atccaacttg	actcattatt	agcaaacac	agtattacat	63360
acgcatagta	tccatctaga	agttataagc	atgaaacatc	cacagatata	aaaaaaaaca	63420
cccgaacccg	aaacaaacac	agagttggcc	gatcagaccg	cgggctggcc	ggtctgacca	63480
ctcacataac	tctggtctga	cgggcaaccc	atgcccggtc	tgaccggacc	aaaactctag	63540
tagcacatgt	tcatcacctg	caaatccaat	catctccaaa	atcacttcac	caataatctc	63600
ctattatcaa	aaccaataat	ctcagatgcc	aattgttcat	catagaataa	gaatgaaaca	63660
cactttgatt	tacacttttc	accttggaat	caaagattta	atgcaaatta	agcttcacgt	63720
tcctagtttg	agcttccaat	ttgtacatat	ttgtgattta	taatgtctata	tatacatgta	63780
ttagagacaag	taacgcagtc	cacgtgggat	gttgggccatg	cctggataag	ctgagcaaat	63840
tttagactcg	tgtcaaaaaca	atgtcttgaa	tttcggtgaa	ctttttgttt	acaggttcag	63900
caaagatgag	ctacaaaacga	tacaagcatt	tttgattgct	gccgaagcat	caaagaaaag	63960
catactattg	aaggtttggg	tgcagcaagt	aagggatctt	tcctatgaca	tcgaagattg	64020
ccttgatgaa	tttacagttc	atgtgggcag	ccaaaacttg	tcgaggcagt	tgatgaagct	64080
aaaggatcgc	catcggattg	ccatccagat	ccgcaatctc	aggacaagaa	ttgaagaagt	64140
aagcactagg	aacatacgct	acaacttaat	agagaatgac	ctcacctgca	ccactgatga	64200
gaggaattta	tttatggaag	acattcgcaa	tcaatcagct	aacaacatcg	aggaagtctg	64260
tcttgtgggt	ttttctggac	ccaaaagaga	gttgcttgat	cttatagatg	tccatgccaa	64320
ggacggacct	acaaagggtg	tatgtgttgt	cggtatgggt	ggtttgggta	agactactat	64380

tgcaaggaaa	atztatgaaa	gcaaagagga	cattgcaaa	aatTTTTctt	gctgtgcttg	64440
gattactgtt	tcacagtcct	ttgttaggg	ggaactactc	aaggatttga	tggtgaaact	64500
ttttggagag	gaagtactga	agaagcggcc	gagagaactc	gaagggaagg	ttccacaagt	64560
agatgacctt	gccagctacc	tcaggacaga	gttacatgaa	aggaggtact	ttgtttgtgt	64620
tgatgacgtg	tggagtacag	attcatggaa	atggattaat	agtattgcct	ttcctagaaa	64680
taacaaaaaa	gggagccggg	tgatagtaac	aacaagagat	gttggttag	ctaagaagt	64740
tactttcgaa	ttgcttatct	accagcttaa	acccttagaa	ataaactatg	caaaagagtt	64800
gctttctacg	aaagcaaatg	aagcaatagg	agatatggaa	agtataaaaa	agatgagtga	64860
cattataact	aaaatagtaa	agaagtgtgg	gtattttacc	ctggctatac	tcacaatagg	64920
aggcgtgctt	tcacacaaag	agataagaga	gtgggaaact	ttttatagtc	agataccttc	64980
agagcttgag	agcaacccaa	accttgaagc	aatgagaagg	atagtacccc	taagtataca	65040
ctacttaccg	tctcatctta	agcaatgctt	ttgttatcta	agcatatttc	ctgaggattt	65100
tgaaattaat	aggaaccgtc	tggtaaatag	atggattgca	gaggggttta	ttaaagctag	65160
gactaatatg	actattgaag	atgttgggaa	aagttaacttt	aaagaactta	tcaaccgtag	65220
catgattcag	tcatcaagag	cgggtatacg	aggagatttt	aagagctgtc	gagtcctatg	65280
catcatgcgt	gatattacaa	tttcgatttc	tagagaagaa	aatttcacac	tcttaccgga	65340
tggcactgac	tacatgtgag	tacatgggaa	cactcggcac	atagcatttc	acgggagtag	65400
gtattgtctt	gaaacaagct	tggactggag	cattatacgg	tcattaacta	tgtttgggtg	65460
gaggtccgta	gaactagagc	attcagtttg	ttcatctcag	ttgaggatgt	tacgggtctt	65520
ggatctaata	gatgcacaat	tttctatcac	acaaaatgat	gtcgacaaca	tagtgctctt	65580
gtgccacttg	aaatacctac	gcattgcaag	atacagatac	cgttcaccat	atattttattc	65640
acttccacaa	tcctatagct	gactgcatgg	tctgcagaca	ttggacttgg	gtcagacgta	65700
catttcaaca	ctgccaaact	agattactaa	cttcggagtc	tcctagtcct	tcgatgcctg	65760
aaagaatatt	tttcttcttc	tttaagaaca	cttttaacta	acacattatg	cctgcccattg	65820
atattcacac	ctttcgttag	tacctcggtg	cgttctgaaa	caattgctaa	attgcacatg	65880
gccaccaaag	gcttccgttc	aaaatcaa	ggtgtcaagg	taccaaagg	aatatgtaag	65940
ttgagagact	tacaagagga	ttgctacggt	ccagcaggtt	gtaccgggcg	gtactggtac	66000
cgcgcggtac	caaaacccat	ctaaccgttg	aatccgggat	gggtaggatac	gggagagaaa	66060
agatgagcaa	gggtggatga	gggagtacct	gtttcgagtc	gtcgttcccc	gcggcgcgcg	66120
cgtggagtag	ctgtttcgag	tcgtcgctgt	tcccggtggc	ggcgagagc	aacaagggac	66180
gccggcgcg	cgggagagga	taaagtccgg	cggcagcgcg	agagagaaaa	aagggaacgg	66240
cgacggtgcg	ggagaggaac	aagggaagga	cggcgcgcg	ggaagaggaa	caagtccgac	66300
ggcgaggaag	aggaacacgg	cggcgcgcaa	aatcatccag	cgtagctagg	gttcgagccg	66360
cccgatccaa	acccatctat	tgacgcgcaa	gttactcttt	tacccttcca	actctcttct	66420
ccatgcggtg	tcacctaagg	gacatttttg	gtaccgtgcg	gtaccacgca	acatcagccg	66480
ttggatcagg	ccagatccaa	cggccagcat	ttggtaccgc	tcggtacggt	ggacagtaaa	66540
aaaactcgac	ttacaaatat	tggaggtagt	ggatattaga	aggactagca	gtagagcaat	66600
caaagagttg	gggcagttaa	gcaagctgag	gaaattatgt	gtggtaacaa	agggatccac	66660
aaaggaaaaa	tgtgagatac	tctatacagc	tatccagaag	ctctgtttcc	tacaatctct	66720
ccatgtgaat	gctgtgggat	tttcagggtat	tggaaacttt	cagtgtatag	attctattttc	66780
atctctctct	ccctactga	ggacactcag	gttgaatgga	agtcttgagg	agatgcctaa	66840
ctggatttag	cagctcacgc	acctgatgaa	gttcaactta	tggaggagca	aactaaaaga	66900
aggtaaaacc	atgttggtag	ttgcggcggt	gcccacacct	atggctcttt	atcttcatct	66960
caatgcttac	catggggaga	agctagtatt	caaaatggga	gcattcccaa	atcttagaac	67020
attttcgatt	tacaatttgg	agcagctaag	agagattaga	tttgaggacg	gcagctcaat	67080
cttggttgaa	aagatagaaa	tattcagggg	ttggaatcag	ggattgttgg	tatcattcac	67140
cttccaaggc	tcaaggagat	ttcacttggg	tacggaagta	aagtggctag	gcttgggtcag	67200
ctggagggag	aagtgcgcac	acacccaaat	caccccgtag	tgcgaatgag	ggaggaccga	67260
agtgatcacg	accttgcttg	tgacgcccga	ggatcccctg	ttgaagtggg	agcaacagat	67320
cctgtgagag	ctcgcagttg	cagggtgatc	cgttgacaac	gaacgacagg	tcagtcactc	67380
cctacacggc	atcttaatga	acttgtttta	tcctcttggt	agatcgatga	ttttaactca	67440
ccctttcatc	tctctcgttt	tcttaacctc	acagcgaaga	gataagcaca	acttaagctg	67500
gtttgatcaa	gtgatgatct	cctctcccat	tggcatctcc	ggtcgctccct	gcttctgctg	67560
ctgcgcacct	cgctgctctg	aggaggggtg	ctgatctaa	gaggtctcca	ctttcttcaa	67620
ttgcgtctca	tgctctcgat	tcttccctct	cgggtatgaa	ttgttcaatc	tgatattttc	67680
tcgcgatctg	ctactggttc	cagcatgagc	atttgaacca	gcagcttaga	attatcgttt	67740
gatcaggtgt	tatttatccc	ttcttacctg	ggaactctac	ttatccattt	cattcagaac	67800
agaaaccatg	tttattacac	tatagagggg	aacaacagat	caggcacgag	ttgtgggttt	67860
gttatttctt	ttttggtgtg	cacaccaggt	gattgctaga	atgtctgaaa	gagcttgtgt	67920
gcatggttgg	ctcaacatta	tgtgctaata	actcttttat	accgttgctg	acctatcaca	67980
tagtgcagga	gtaaaaat	gctatgttta	ttgttactta	atgttgattt	tccttttctg	68040
aaagaatatt	agcttttttag	ataacaaaaa	gaattattatg	tatcctgcaa	aaagggttga	68100
tttggtgatc	actggctagt	acaaaagtaa	cgagagatca	gaaaaaacia	agttttggtt	68160

acactagctc	attacaattt	atgtgctgaa	catgtgaaaa	attaataatt	gtcgtacgtc	68220
atggttctct	ggaagtctgg	ctgcagggtg	ttagttttgt	catatccatt	atcttgggtc	68280
accttttcct	actaaactag	gactatgagt	agaaaaaagt	aattgttggg	tccaagttca	68340
aaagataggg	agatgtgagc	taaggaaactt	gcatttcttg	atctccttca	gagcttctca	68400
cctcacataa	atggatctct	gtttatccca	aagcaacatt	ttttaacctg	ctagttccaa	68460
attgatcatc	tttgttatcc	ttcattttatt	ctattttctc	ccctaaggga	gttttctagg	68520
gtggatatgt	ggaaaatcga	atgcagctat	gctgttcaaa	ccactgtcaa	aagatgcagg	68580
acaggatggg	cagatgttta	ttcagtggtc	ttgttcaaat	gaaacatatg	ctattctgga	68640
agaggttggg	taacttacat	tgtatataac	ccttaccttg	ttactatcct	cttgcaaaat	68700
gcactggattg	gtgaaatcat	gttttttgc	atgcagaatt	gttttctgaa	gctcaaagtt	68760
gaagctgcag	tcttcactgt	ttctggcaga	acccaaattg	gtggcctggg	gctgcataac	68820
ctgcagagaa	cgcaacggcc	actgcttgta	gccttcaagg	atgctacatt	attgatcatc	68880
tactacgggt	ccgatcaaaa	cttctgatcg	agttcgccac	cactgtggac	tttgcataatg	68940
ttgatggagt	gggtgcgtatg	aatccagggg	gcagagccac	tgccctgcga	ccttgggggt	69000
tgtcaacgag	catacagtat	aatattttgc	tgtattttca	gtgattaaaa	acgaaaaattt	69060
taaagcaaac	attgaatgca	attagatctg	cccaggttct	caaaaatttct	ttagctccgc	69120
cactgcttga	atcgatgtca	tatgctgcaa	attaaagtga	ttggagatgt	gcatatgctc	69180
gaatgttctc	ggttatattg	taattgtggg	gtagcaactt	tatcttgggt	acaacctagg	69240
aacaaggggtg	aaattgtact	aattcttatt	tgtgtacaat	tgatatatct	cattacttct	69300
tgcattctgt	tagtcatatg	tatttccata	catcgtttgc	acctgctatg	gctgcttgag	69360
gatatggcaa	agcttaaaaag	atgatgttaa	catgggtcaca	tggagatgca	gggcactcca	69420
ttttctgttt	ttctctcaat	cttatgtaga	gttaatatat	ggacagtagc	aatagttaca	69480
tcttctgtgc	aactaggcat	actaccacg	tgttgcctcg	ggtctttttg	ggatgggtctc	69540
tattaagatg	taaaacttatt	tattaaatga	attcaatcgc	gtcgcattgg	ttcattttatt	69600
tagacttggg	tgtgatatac	tcctgttgta	aaatataata	acttttacga	ttctagcacc	69660
atttataata	tttataagag	tacctgtctc	agcaatcatc	aatcattttc	tatttagttc	69720
tttctatctt	acccttacat	acctttcaac	actcatccat	tcctctgggtg	aataactaaa	69780
aatgtttaaa	tttcagagcg	gaggtagcaa	taagttctag	taaaagctgt	tgaatagtcc	69840
cacattgggt	gtaaaaggac	aaatgacct	acatataagt	gggtgagccc	tgtacctcat	69900
tagctagctt	tttgggtgag	gtccctttac	gatcttataa	ttggtattag	agcctggcta	69960
gtttgacatt	taccgaggg	cactactaga	aaaaggaccg	accgcccgt	gaccaacaaa	70020
ggaacataga	cgagatcgcc	ccaaaaaag	ccccacac	caacacaaag	cccaactcct	70080
aaagcgtgct	tgcaccaatc	gttcgagaga	tttcggctag	gggatgccaa	aatgacgtct	70140
tcgagaaaag	aagcgtatga	aaaccgccc	cgccgtctgt	cggggctcaa	aggagccaag	70200
actgggcttt	cgcccgcaa	ccacccttga	gggataagac	atcacgacaa	cgccctcgac	70260
atcacgacaa	cgccctcagg	aagtcaggag	ggggaattaa	ccatcgttgt	cggctcggcc	70320
aaggccgggc	tgggttttca	cctgctgtc	accacctgcg	aatccacggc	tgacgcaccg	70380
atgctccacc	accactcaac	ctctgccgc	aagtgggacc	actgcaccgg	cgccccctgt	70440
cagccaacct	tcattgcgcg	aagaccgtgc	cacaccacc	gacagctcct	cctcgccactg	70500
agactgcctc	ctccactacc	gcccagcct	ctcgcgccaa	gccggccttc	tctactggac	70560
gcgcctctgc	cgccaatcca	accttccctc	atcgcccgcg	cctctcgcg	caagccggcc	70620
tccattctct	cgcccgcg	ctctcgcg	gagccagcct	cgctgcccag	cagttgcgc	70680
tccctgcacc	aagccggctt	tcgaccctc	ctccaaaggc	taccgcaccg	accggatagc	70740
gccgtctgcc	acgcccccg	ctagccgtcc	gagaccgcca	tgccctcccc	tatggcggtg	70800
gcgatcgcca	ccaactagg	ttgaaagtga	ttcggataat	ttccgtccga	ccggaccttt	70860
tttcggtatc	ggatagtgtc	ggtcggatat	attcggaaat	ttgaatttga	aatcatgaca	70920
acttcaaaata	gcatttttaa	atactaaatg	atttcaactg	aaaaagtc	caacaacaaa	70980
gttgataaac	tcactcaagat	ttataacttt	tattttggct	atttcttcat	ccgacaaagt	71040
gatagtaata	ttgttcacaa	aatttacatc	tctcattagg	ttttatgaac	tataagagag	71100
atatataaat	tttatgaaca	atgttactat	tactttgtag	aacataaaaag	ttgtagaact	71160
catcaagaaa	tacaactttt	attttgggtc	tttttctaaa	agtttgaatt	tgaatttgaa	71220
aatatgacaa	cttcaaataa	tattttcaaa	tacttaatga	tttcaactga	aaagtcatca	71280
acaacaaagt	tgtatattat	caagatctat	aacttttatt	ttagtcattt	tcttcgtaag	71340
acaaattgac	actaacattg	ttcacaaaa	ttacatctct	tatttgggtt	tatgaactat	71400
aagagagata	tataaaattt	gtgaacaata	tactatcac	ttatcagat	gaagaaatga	71460
ccaaaataaa	agttgtattc	cttgatgagt	tctacaactt	ttatgttcat	gactttttca	71520
gctgaaatta	tttactgctt	caaaatatca	tttgaagttt	tgaaattcaa	ctttttaatt	71580
gataaaacaa	agtcacaaga	aaaaatggcc	aaaataatag	cagtaaaaaac	acaataacat	71640
gatagagcat	gatttttagaa	acatttagga	aaaagaatca	tccaatttgg	agttcatatg	71700
agttagataa	actagtttca	aattttttaa	ttttattttc	gcatacggct	ccttaagacg	71760
tcggtatgga	aaaaatgatt	ttccacgcg	ggctaataag	ttgtccgcac	gcaaaatgag	71820
ctcattttgg	cgtcttgagg	agtcgtatgc	gaaaatgccg	acgcggcaag	ttgtgatccg	71880
tttggaaaaa	tcatagggtc	tcgtacaaaa	gaaattgttt	gtgtagtagc	gaggggtttt	71940

tatattccga	ttaatatcca	tcaccgtatt	cgtttcgctc	cgtaatttga	ttcgataata	72000
ttccatttcg	tttttatatc	cgggtttcca	gttccgaaaa	aaaagaaagt	gaatacgata	72060
gagctagttt	ccgaccatat	tcgatccgtt	ttcatcccta	ccaccaccgc	agccgctact	72120
gccctttccat	ccccgcgccc	atcttgccat	cctcccgcac	cttctcgcag	tcacgcagct	72180
ccgacggcac	acggcgagca	cggcccaccg	tggtagccca	caccgcgcgc	gccacgaact	72240
cctcgccacc	accgcctcga	ccgccagact	ccttcgggcg	ctgggtctgc	cgtcggcgcg	72300
gctaggttcg	cctcaccgac	gccatccctt	cgccaccccc	accgccagac	gctgccgaag	72360
gctgccatcc	cctccccctg	cctccccctg	cgccatcgcc	atccccgcca	ccagacgcgc	72420
ccgcgggcca	ccatcccgcg	agatccaggt	gcggatctag	cggtttcctc	cgtcgcgcga	72480
aacgcctcga	acgcgcgtgc	caccaccacc	agacaccacc	gccgcaccgc	tcagccccgc	72540
tgccagctgc	cccatcgcca	gatccggccg	ggcgccacag	atctgggctg	ttctgctgcc	72600
ccgagcaggc	ccccctccta	tgcccagaca	ctaggatgaa	gccccgcgcg	cactgtcttt	72660
gtggccgcgc	gactttgccc	gcgactgctt	gggcagcgac	gaggcagagg	agggaaaggg	72720
agatgagcac	cggcgaggtc	gtcgctcccc	agttgcccgt	ggggaggggc	gacacgagag	72780
gccaaagcgt	actcaactgc	ctgatgctca	tccaaagtga	gaaagatgct	tgaagctgtc	72840
gtcgaagca	aacttcagtc	ctcgatataa	ttcgatataa	gtgatttctc	tctccatatt	72900
tgtttggaga	aatgctagtt	ataagaaact	aagtgtgacc	atgtgttata	gatgtcagag	72960
aaaacagttc	atthttctca	ttctcaaggt	aattgggaaa	atggagaatt	actgagcgat	73020
acgtgttgct	ggaaaattga	gaatcactga	tgatcgctc	catctgaaaa	ttaccgagcg	73080
atattttattg	ctgccaaatc	aaaatgattc	tattcaaccc	gtgccatggc	atggccggat	73140
ggccccagtt	cactgattga	tcacttaata	tatggactga	acaataaatc	atggtacttt	73200
ggttgtcgag	catgatcatt	atthgtggac	cacagattca	ccgaattaat	tgggatattg	73260
aatcggtcac	acacacgacg	ggcgactctc	gtctgcttta	aaataaatgg	attggacgtg	73320
acattatcta	ctacaacgaa	tctggattag	atagtgtctc	atccaatcct	aaattggttt	73380
atthttgtgac	ggagggagta	tgatgttaac	gtagatggaa	atgaggaatt	gagtagacag	73440
tgtggggctg	gaaaataatg	gaggacagta	acatcttggg	gtgtagttag	gcctggaggg	73500
tcgtccttga	catccaaacc	gcacctaact	ctatgataag	catcctctct	cagattgttc	73560
agtgcaaaag	ctaccaatac	tgctccgaga	gccagaaaaa	agcgtctggt	gcctagtgtc	73620
atcttctatg	taccgttgag	attggttgct	tcaagcttga	agggagagtc	gaacgagtc	73680
atggcggaga	cgggtgtgag	catggcgagg	tcgctgggtg	gcagcgccat	cagcaaggcc	73740
gcctccgctg	ctgccgacga	gaccagcctc	ctgctgggcg	tcgagaaaga	catctggtac	73800
gtactgcgtg	actctcgtta	atthattctg	tagatgtctc	ggaatcagca	actatttgtt	73860
tgattttccat	cgtagcatat	cgattttggt	ggccaccaat	tctaatacgg	cggaaacaag	73920
tagtcactaa	atctggcaaa	tcgatcagct	gctgagtgca	caaacatgca	tgttatttct	73980
tttttttttg	ggttatatgt	taagcaacaa	agcccttggg	taagatatgc	atggcaaatg	74040
aactaatatc	gacatacgta	aagcggagga	ccctcgcttc	catgcgtggg	tgactcgagc	74100
ggtgacaaat	cctagcacct	ccacctcctt	ggatggcctg	tggtgacgct	ttcgcccccg	74160
agtttccctt	gaatacatca	tctacaaggt	gctattaatg	tctagtcaca	tcattttacg	74220
gggtgctatta	ttgcctagtc	tgcccgaaga	tagtttagac	aacactcttg	gatggcggtg	74280
tccttcgccc	agtgatgtcc	aagagcccgt	ggatgtttag	ttgttttagc	atggtgtttg	74340
tggtgctact	agtgggcctg	atgggccagt	tgtaggtcca	gtggtaacca	atcatgctta	74400
gcaatgacgc	gatgcccgga	ttggtgcttg	ttcttttttc	gggtgcgacg	catggtagta	74460
tttacttttc	ctgttttttc	tgattatagc	atcctaggct	atactcttct	aattttattc	74520
tgctatatta	atattaaaac	ttggtatggt	ttgtttcatt	caagaccctt	gggtgtcaaa	74580
ggcttgtttg	gttcaagttc	attcctagcc	ttaccaactt	tttggaata	gcaagaaatg	74640
gtcattgaaa	aaaaaaggca	aaaattggct	aggcctacag	tttatttctt	agcaaagtta	74700
tacttttagca	ttcactaag	ccaaataatt	cggcaatgcc	atthttcttat	ctacatgcca	74760
aatatatggc	taatatthtg	gcattaatth	ctcttattht	ttttggcaaa	attgatcaaa	74820
agttcacatt	tttagctcta	tagtattaaa	agttatctat	tcactttaat	agaccgaaag	74880
tttactcggt	tcggttttta	gcactaccgt	ctcttttctc	ttgatttgcc	gtcaattttg	74940
accggcagtc	ctaccccag	gagacattga	gcagcagccc	gtgatcccc	tctctcgccg	75000
ccggtgacgc	tggtgtggca	tcgttcctgc	tgccggcgaga	ataagtctgg	cgatcatgcc	75060
ctatcgccctg	gagctgcaac	caccactacc	gggcccacgc	atcgtctaga	gcgttatcca	75120
ccctgctcag	cccattactt	gcagctccgg	ctgggtcaga	acctctccat	gcctgataaa	75180
ttggttcaag	attgtcgctg	tcgggccagc	gcttgaattt	tcagaatatg	ccatcgaata	75240
cgcgctgctt	ttaagatatg	ctacccgatt	catgctattt	ttagaatacg	ccatcagaac	75300
acgaattttc	ttcggtccgt	gccactccgt	ctctcgaggt	cagtcgtgcc	gtcgtcatcc	75360
gtccgcccag	cactgtcgtc	gtcagtcgcg	caccgcgtgc	tgactgtccg	ttcagctgcg	75420
ccgtcgcccg	tcggtcgccg	ccatcgccgt	cgtccactgt	cgcgcccgcg	cctgcacccg	75480
tgtcaggcgc	ggcgtcgctc	gtccgctgtc	accatcatcg	tcgtccactg	cggcgagcgc	75540
agacggctgt	ggacggatga	ttgcgcggca	agcgcaagcg	gcggtggagc	gacgacgggg	75600
cagtgacgcg	gagcacggta	gccgatggac	tgacgttggc	ggcattggga	gatggacgac	75660
gacggcatga	ttgacgtggg	gaacggaatg	tcacggaacg	gagaaaattc	gcactccggt	75720

ggcatatatt	ccgaaaatag	cacgaattgg	gtggcatatc	ttaaaaacag	tgcctatattg	75780
gtggcatatt	ctaaaaattc	tcggtcagca	taatcccat	caatcccaa	tccctcaaca	75840
gttgggttaa	tattcctgga	gatgtgttcg	gttgtttagg	ttgaagttct	ccacttcacc	75900
tccatgagta	catgcacctc	tacacgtacg	ttcttaatgt	gtttgtttgt	tctatcctcc	75960
gcttggttgc	tattttgttg	gttccgatct	gatttgatct	ggagcggggg	cgatcttcca	76020
cgacggcgag	agagacgttg	ttcgggctgc	tcgattaggt	tcaactgttt	aggtcgaagg	76080
gaggggtaga	attgcaattc	aagtgcattg	tcagtcaatt	tgggtcaaaa	ttaacatcaa	76140
actgggataa	agagacgaca	gtgccaaaat	tggtaacggg	aaaactttga	gttctattaa	76200
agtgaaccag	taactttcgt	tgctatagaa	taaaaacgta	aacttttaat	gctccttggg	76260
tgagcttggg	acaaaaccaa	cagacgtaaa	ataaacacta	tctgaatca	agtctactaa	76320
gttccattga	actcaaccag	gatacgtaca	cttctcttta	gaagatgtct	tgttttcact	76380
ttgtacaatt	ttttctattg	taaaatttgg	acctcgttgt	acctaggtac	aagaggtacc	76440
atgagatacc	aaattttaca	ctaaaatttt	ggtacctcat	ggtacctcct	caacgaccgt	76500
agaattgtct	ttaattttaat	ttaaaaaaa	cataatattt	ttaaagcata	ttatggaaat	76560
tttagtaatt	attacttttg	taatatatga	gttacgggta	tactcgagat	atcctaaatt	76620
gcttgagagt	gaataattac	aaggtatatc	aaagatgagt	tgaaaataat	gcaggcattc	76680
cttagagctg	cagaagttat	gaaaaagaaa	gacgaactat	taaaggtttg	ggcagagcaa	76740
atacgtgacc	tgatcatatc	cattgaagat	tcccttgatg	aatttaaggt	ccatggtgaa	76800
agtcaaacc	tatttcgtca	gttgggtgaa	cttagatagc	gtcaccggat	cgctagcccg	76860
tggtatgtta	gttgbttgca	catggtgctg	gatggtgctg	tcatggtcct	gttgtagggtc	76920
tggtaccaac	cagtcattgt	tagaaatagc	cggtacagtg	cacggtgcta	ggactttact	76980
tggtggtctg	tgacgcgcta	tcgacatgtg	gtggtgctg	tttttttttt	ccggattaca	77040
atctcatag	gctcacctct	agttattttg	ctgctatatt	aatatgaaaa	cttggtatgg	77100
ttcgtttctt	ttagaaaaaa	acctagttga	tcaagggtca	gttttcttca	agtgcatctc	77160
taatcttagc	ttcttttttt	tttgcaatgg	caagaattgt	tcattaaaaa	aattgataaa	77220
aattggctag	gcctacgttt	tgtttcttac	caaagttgta	ctttaacaat	aaactaaggc	77280
aaatatttctg	gcaatgccat	tttcttgtct	acagaccaa	tatatggcta	aattttggca	77340
taaccatttt	tttgtttgct	tggttgagct	tggtacaaac	caaacagacc	caaaaataaac	77400
agtgtcatag	atcacgtcta	ctaaattcct	ttgaactgaa	ctagaatata	gttgctctta	77460
aaagatttct	tgatttccact	cggtaccatt	tactagtaca	aacttagatt	taatttttaa	77520
aaataaaatc	ataatattgt	tattatggaa	aatttagtca	tagtactttt	gtaatatatg	77580
agatgggtta	tacttgagat	atcctaaatt	gctttaagat	gaataattgc	taggtatatc	77640
aaagatgagc	taaaaacgat	gcaagcattc	cttagagctg	ctgaacttat	gaaaaagaaa	77700
gatgaactat	taaaaggttg	ggcagagcaa	atacgtgacc	tgatcatatg	cattgaagat	77760
tcccttgatg	aatttaaggt	ccatattgaa	agccaaacc	tatttcgtca	gttgggtgaa	77820
ctcagagaac	gccaccgaat	tgctatccgt	atccacaacc	ttaaatcaag	agttgaagaa	77880
gtgagtagca	ggaacacacg	ctacagttta	gtcaagccta	tttctctctg	cacagagatt	77940
gacatggatt	cctatgcaga	agacattcgt	aatcagtcag	ctcgcaatgt	ggatgaagct	78000
gagcttggtg	ggttttctga	ctccaagaaa	aggctgcttg	aatgatcga	taccaatgct	78060
aatgatgggc	cggccaaggt	aatctgtgtt	gttgggatgg	gtgggttagg	caagacagct	78120
ctttcgagga	agatctttga	aagcgaagaa	gacattagga	agaacttccc	ttgcaatgct	78180
tggtattacg	tgtacaatc	atttcacagg	attgagctac	ttaaagatat	gatacgccaa	78240
cttcttgggc	ccagttctct	ggatcaactc	ttgcaagaat	tgcaagggaa	gggtgggtgg	78300
caagtacatc	atctttctga	gtacctgata	gaagagctca	aggagaagag	gtactttgtt	78360
gttctagatg	atctatggat	tttcatgat	tggaattgga	taaatgaaat	tgcatttcct	78420
agaacaata	agaagggcag	tcgaatagta	ataaccactc	ggaatgttga	tcttgccggg	78480
aagtgtgcca	cagcctcact	ggtgtaccac	cttgatttct	tgcagatgaa	cgatgccata	78540
acattgtcac	tgagaaaaac	aaataaaaa	catgaagaca	tggaatcaa	taaaaatatg	78600
caaaagatgg	ttgaacgaat	tgtaaaataa	tgtggtcgct	taccattagc	aatacttaca	78660
ataggagctg	tgcttgcaac	taaacagggtg	tcagaatggg	agaaattcta	tgaacacctt	78720
ccttcagaac	tagaaataaa	cccaagcctg	gaagctttga	ggagaatggg	gaccctaggt	78780
tacaaccacc	taccatocca	tttgaaacca	tgctttttgt	atctaagtat	ctttcctgag	78840
gattttgaaa	tcaaaaggaa	tcgtctagta	ggtagatgga	tagcagaagg	gtttgtttaga	78900
ccaaagggtg	ggatgacgac	taaggatgtc	ggagaaagtt	actttaatga	gctaataaac	78960
cgaagtatga	ttcaacgatc	aagagtgggc	atacgcagaa	aaattaagac	ttgtcgaatt	79020
catgatatac	tccgtgatata	cacagtttca	atctcgagac	aggaaaattt	tgtattatta	79080
ccaatgggag	atggctctga	tttagttcag	gaaaacactc	gccacatagc	attccatggg	79140
agtatgtcct	gcaaaactgg	attggattgg	agcattattc	gatcattagc	tatttttggg	79200
gacagaccca	agagtctagc	acatgcagtt	tgtccagatc	aattgaggat	gttacgggtc	79260
ttggatcctt	aagatgtgac	attcttaatc	actcaaaaag	atttcgaccg	tattgcattg	79320
ttgtgacctt	tgaaataact	gagtattgga	tattcgctac	ccatatattc	acttcccaga	79380
tccattggta	aactacaggg	cctacaaact	ttgaacatgc	cgagcacata	cattgcagca	79440
ctaccaagtg	agatcagtaa	actccaatgt	ctgcatactc	ttcgttgtat	aggacagttt	79500

cattatgaca	actttagtct	aaaccaccca	atgaagtgc	taactaacac	aatatgcctg	79560
cctaaagtat	tcacaccttt	agttagtcgc	gatgatcgtg	caaaacaaat	tgctgaattg	79620
cacatggcca	ccaaaagtgg	ctggctcgaa	tcaatcgggtg	tgaaggtacc	caaaggaata	79680
ggtaagttag	gagacttgca	ggttctagag	tatgtagata	tcaggcggac	cagtagtaga	79740
gcaatcaaag	agctggggca	gttaagcaag	ctgaggaaat	taggtgtgac	aacaaacggg	79800
tcgacaaagg	aaaaatgtaa	gatactttat	gcagccattg	agaagctctc	ttccctccaa	79860
tctctccatg	tgatgctgc	aggaatctca	gatgggtggaa	cacttgagtg	cctagattct	79920
atttcatctc	ctcctccoct	actgaggaca	ctcgtgttg	atggaattct	tgaggagatg	79980
cctaactgga	ttgagcagct	cactcacctg	aagaagatct	acttattgag	gagcaaaacta	80040
aaggaaggta	aaaccatgct	gatacttggg	gcactgcccc	acctcatggt	ccttcatctt	80100
tatcggaatg	cttaccttgg	ggagaagcta	gtattcaaaa	caggagcatt	cccaaattctt	80160
agaacacttt	ggatttatga	attggatcag	ctaagagaga	tcagatttga	ggacggcagc	80220
tcacccctgt	tggaagagat	agaaataggc	gagtgcaggt	tggaatctgg	gattactggg	80280
atcattcacc	ttccaaagct	caaggagatt	ccaattagat	acggaagtaa	agtggctggg	80340
cttggctcagc	tggaaggaga	agtgaacgca	cacccaaatc	gccccgtgct	gctaattgtac	80400
agtgaccgaa	ggatcacga	cctgggggct	gaagccgaag	gatcttctat	agaagtgcaa	80460
acagcagatc	ctgttcctga	tgccgaagga	tcagtcactg	tagcagtggg	agcaacggat	80520
ccccctcccg	agcaggaggg	agagagctcg	cagtcgcagg	tgatcacgtt	gacgacgaat	80580
gataggtcag	tcactcccta	catggcagct	taattaactt	gtttctaatt	ctcttcttgt	80640
tcagtattag	ccatcaggtg	agggcgatga	tttcaactca	cttttcatct	ctctcgtttt	80700
cttaacctga	cagcgaagag	ataggcacag	ctcaagctgg	ctgacgatct	cctcccccat	80760
cagcgtcgtc	atcagcgaac	agaaagggca	gagcttccct	gcttctgctg	gcacctcacc	80820
gctctgactc	ggaggagcat	gatgatcaat	gaggcttcca	gtttccaaat	gtgtggctaa	80880
cacaccagggt	tgccctatc	cgaggataga	attgatgatc	caattttttt	ccttccgggtg	80940
aggttcaaac	atttgatgct	tagtttcatg	agggatttct	gtgtttcggg	ttgtgatatg	81000
cacaattact	ccagtttat	gctttgatgc	tgagttttta	tttctcttct	tacacgtgca	81060
ctcttcatct	ccatttcatt	caaaacagaa	accaagttga	ttgcattgtg	gaggggaata	81120
tgagatcaga	aatcaaattg	ttagttgtgg	ttttcttatt	tcgtttgcta	tgcgagattg	81180
cgcaccaacc	gtttgctaga	atgtctgaaa	gagcctatgt	acatatgggtg	gcctgaacat	81240
tacaagttat	catattttat	attgttgcta	gctttccttt	caaaaaaaa	aaaaattggt	81300
cctaaccgat	cacatagtc	agtagtccag	tagtaagatt	tttgtaagt	ttattgttac	81360
tgaatatatt	gtttggcctg	cagttgttat	ttctctcaaa	acaaaattat	ttggtagtct	81420
caagtaaaaa	agaaaagaca	gatcagacaa	gttgttttac	tctactagtt	tcaaattgat	81480
catctctgtt	tgttcttcat	tcattttctt	tctgtaagag	agtttgctag	gatgggtgatg	81540
tggtcatgtg	gatgatcaaa	tggaactac	gcagcgcac	acactgctgc	ccaaccttta	81600
cccactgtag	acaaattggag	tgaggtcct	aaaccaggcc	agaagtttgt	tcagtgttct	81660
tgttccaaaa	taaacattct	ggatggcagg	ttatttctat	ataacattca	ctcttatagc	81720
ttgcttagtc	aaaactacaa	ataaggtctc	ctaaaaaaat	gcatcgacgt	tgatatctgt	81780
gttttctgcc	atgcagaatg	acttgctctc	aatgggttgaa	gctgcaatct	tccaggctca	81840
tttctggctg	aacccaaatt	gggtgcttgg	aggctggagc	tgcatgacat	cagagataac	81900
aatggccact	ttttgttgcc	atgggtgagg	gtacatggat	catgccgcta	agcctttact	81960
ccgagctagc	agaaaaactgg	ctggctgtag	atcgagttcg	ccatgcgccct	caactttgtc	82020
gatgcgatgg	cgatcatgga	tagatgtatg	tatgtaaaaa	cacaaatttt	agtgattaca	82080
gaacttatct	ttctctttaa	tcagattatt	aatcagtggtg	atttttcttt	ctctagtact	82140
gtataaaaa	acttttttat	cgtaaatcct	cctaaaattc	ctattttata	actcattttt	82200
cttcagtttt	tttttctgta	ttttggtttt	ctttcctcta	cgtgactaca	cattttgaat	82260
tgaacatgct	ctgtatctgc	tcggaatact	tattattcag	ccaacttaaa	tgcatgagat	82320
ttgtcccggt	tcacaaaaaa	ttacctcgag	gtaccagtac	ctcatgggat	caaattgttt	82380
ccgatcgtga	aataattttg	taccgttagg	taccgtatct	cgagatctaa	atgcataagg	82440
gcatttggaa	tatgcactta	acagttgttt	gaacacttcc	aagggaatatc	tcctcagttg	82500
tcggacgact	cattcatttt	catcgcttcc	aacaataatc	aactgtgtct	cttctctctc	82560
ccccaatgct	ccccctagat	ccggccctac	cgccgctaga	gctgaccagc	gtctatgcgg	82620
cggttaggac	agtggcagcg	gggagggtgg	aggtggaggc	gctgcgggtg	cgccagagag	82680
cagccggggc	cgacgctga	ccttccagggt	tggtgatggg	tggaagggtg	cgggaggagc	82740
gcagctagcg	gctatgcgtc	agcgatggag	gacctcgga	caacgggtgg	gacggcgggc	82800
gcctaggagc	acaacgactc	tcgtcggcgc	tgccggccct	aggggctccg	gtggaggaca	82860
acggctattc	acgtcggcgc	cagtggccct	gggggcattg	gcggctcccg	tcggccagcg	82920
gcccaggatg	tcagcgggtc	tcgttgggtg	cggtggccct	aggggctgcg	gcggaggagc	82980
gcagcgggtc	acgtcggcac	tgccggccct	aggggtagcg	gtgccccagg	acagcggcag	83040
ctcccgtcgg	cgccggcggc	cctaggggta	gcagcggagg	acggtggcgg	ttcccgtcgg	83100
ggttggtagc	ctgggacggc	ggcggtctga	gcactatgga	taatggaggc	ctagaaattt	83160
ggcaaaagtg	aagctaacc	cgctcgggtc	gttttgggtg	gctagttcta	actgaacgat	83220
gaacgacgac	ggttgaataat	gtgctaactg	gcggcgtgag	tcaactcacc	taaaacggat	83280

aaagatggca	ccaacagagg	tttgcattga	cagtgcacta	ggggcgatga	agaatacaca	83340
acttcactc	gtcaaaacttg	gctgtttcat	gagaatatgg	cgggaagcag	agaagctggg	83400
atgtgtcgag	gtcgtttggt	tttcttttat	tttttggttg	tgtgttctcc	tccttggtga	83460
gggtgtgagtc	taagtgtctct	tgtatccctt	tggtgtgta	tatccttcgt	ggatatagag	83520
gccagattaa	tgaaaaacca	ttattaaaaa	aaagtgttg	tcggctaatt	aaacctgatt	83580
aagaattcca	tgtgcaggga	catgtactag	cgttcccaaa	tcttagaaca	ctttggcttt	83640
acaatttga	tcagctaaga	gaaatcagat	ttgaggacgt	cagttcaccc	cagttggaaa	83700
agatagaact	ctcttggtga	aggttggaat	cagggattat	tggatatcatt	caccttccaa	83760
agctcaagga	aatttcactt	gaatacagaa	gtaaagtagc	taggcttggg	cagctggagg	83820
gagaagtggg	cgcacatcca	aagcatccag	tgctgcaaat	gatggaggat	cgaagctatc	83880
gcgacctagg	aggtgatgcc	gaagtatctg	ctgtacaagt	gcaagcagga	tccctccct	83940
gagcaagagg	gagagagcac	gcaggtgatc	acgttgacga	caaactacag	gtcagtcact	84000
ccctacatgg	cagcttaatt	agctagtttt	ctcttcttat	tcagtattag	ccgtcaggtg	84060
atatcgatga	tttcaactca	cctttcatct	ctctcctttc	cttaacccaa	cagtgaacag	84120
ataggcacag	ctcaagctgg	tttgatcaag	tgatcatctc	ctcctccatt	ggcatctcgg	84180
gtcgtccctg	gctccctgct	tctgcggctc	cgagcagggg	tgctgatcta	aggaggcgtc	84240
cacttttttc	aattgcgtct	caggtatgaa	ttgttcgatc	tgatcttttc	tcgtgatatg	84300
ttactgttcc	agcatgagta	tttcaaccag	cggcttagaa	tttttcgttt	gatcagggtt	84360
tttcccttcc	ttacctgggc	actatacttt	tggttttctt	atttcatttt	tgctgtgcac	84420
accaggtggt	tgctagaatg	tctgaaagag	cttgtgttca	tggtttagctc	aacattatgt	84480
gttagtcata	ttttatatcg	ttgtcgacct	atcacatagc	gcaggagttt	tttgctatgt	84540
ttattgttgc	ttgtgttga	ttttcctttt	tgtaaagaat	attagctttt	tagataacga	84600
aaagaatatt	acgtatcctg	caaaaaggat	tgatttggtc	gtcactggct	agtaggggtg	84660
aaaacggtac	ggaaactttc	cggattccgg	acctattttt	agaaacggaa	tctgtcggtc	84720
ggaatttttt	tggaaatttt	cggaaacgga	aacgaattcg	gaaatatatt	ctcggaaacg	84780
gaattggaaa	tgataagggc	agtttccatc	ggaactcgga	atcggtcgga	aactttcttg	84840
aaattttctc	ggaattttccg	gaaattttgt	gactgaaata	gtgaatacca	tgggtatttg	84900
ctgttatttt	ttttaaaagta	tttgttatgc	aaatctgaag	ttacataaga	atattttttt	84960
cctgcatttg	gatttatcaa	catcagtact	ctcttaaaca	tagataaatt	atttcataga	85020
ttgtgttctg	tgatttgagac	ttaaaaaata	gacttatatg	attgtgtttt	atgatgaatt	85080
gttgaccgtt	gagacttgag	aattggattt	atcagtttga	ggggtttttt	attccgataa	85140
atttcgttac	cgtattcgtg	ccgattcgtt	ttcgtctcgt	tttcggtttc	gataaatatt	85200
gattccgttt	tcatatccgg	agtttccgat	tcggattgtg	aaaacaatat	gaaaacgaaa	85260
acgataacgg	tggtttttgt	ccgtttccat	accgttttca	cccttactgg	ctagtacaaa	85320
acaatttggg	ttgtcggagc	tgctggtctt	gggaaactac	tcttcaaagg	tggtttacaa	85380
aactctgatg	ttagtaccac	gtccttgcat	ggagagatat	agaagagtgg	gaaattttgt	85440
atgctcaact	tccatcagaa	cttggatgca	accacaagct	tcgagcaatg	aagaagggtg	85500
tagcccttag	ttacaattac	ttgccttctc	atgttaagcc	ttgctttcta	tacctttgca	85560
tctttcctga	ggattttgat	atccaaagga	agcgcctagt	tcatagatgg	attgcagagg	85620
gatttgttag	agctaagggt	ggagtgaaga	ttgttgatgt	gacagagaaa	tatttttaatg	85680
agttgattga	ctgaagtatg	attcaagcat	ctagagtga	catagaagg	actattaaga	85740
gctgcgagat	ccgtgatc	atgcatggtg	taatgatata	aatatcgga	gaaaattttt	85800
tatatctgat	gagggtgat	ggaactagtg	tagtggagga	aaaatatctg	ccatgtagcg	85860
taccatgaca	gcaagtgttc	tattatagga	atggactgga	gccatgtacg	gtcgttaact	85920
ttgtttggcg	atgagagacc	caaagagctc	tcacctccat	tctgttctcc	ccaattgaaa	85980
atgctaaggg	tgctggatct	actagatatt	atatttggac	tagcaaaaag	atatggataa	86040
aatatgggtg	ttgcgtcact	tgaaatatgt	caatattagg	tgttccaatg	aatgctcaag	86100
catttatgca	cttcctagtt	ccataagaaa	attacaagag	ttacacactg	gacatatctg	86160
acacttatat	tacaatgcta	ccaaatgaga	ttagtaaatt	gcagtctatg	tgctcctcgt	86220
ggtagaagac	aaggatccta	ctatgacctt	gatacatata	atcgtaagga	atgtgtactt	86280
attttatcac	gtattccttt	gattatggct	ttaaagtgatt	ctgataacca	tagaagacta	86340
attaccgatc	tacacacggg	ttgttcaagt	cattggcata	taattaaaga	tgggtgcaagg	86400
gtaccaagtg	gaatcaagaa	tttgaagaga	ttgaaagtac	tagagatagt	ggatatcgcg	86460
gtaactgaca	gcagagcaat	tcaagagttg	ggggaactta	accagctaag	aaaactaagt	86520
gtcatgacaa	aagggtcgaa	caagaaaaag	ttgtgtcagc	catcgaaaag	catcgaaaag	86580
ctcacttctc	tcaaatctct	ctatgtggat	ggcatggat	actcacttga	tggaaacact	86640
gagtggcttg	attctatttc	ccatcctcct	tccctcaaga	gccttagatt	gaaggggtgt	86700
attaaggaga	caccaactcg	gtttagggag	ctcaaacact	tgggtgaagat	ttacttatat	86760
aaaagtcgcc	taaatggaga	taccatggag	atactcgggg	aactacataa	tctcatggat	86820
cttcactttc	gttggatgac	atacgttggg	gagaagctag	tgttcattga	gggagcattc	86880
caaaatctcc	ggaagcttgt	tgttgaaact	gaggataaac	taagagaggt	gaggtttgag	86940
gagggcacct	cacccagatg	ggaatggata	gaaatctgtc	attgcgaact	gatatcaggg	87000
attgttggtg	tcaagcacct	tccaaggctc	aaggagatag	gactcaaata	tgctaaagtg	87060

gcaaggcttg	gtcagctgga	gggtgaagtg	gacacacacc	ccaatcagcc	catattgccc	87120
ctgtctgaga	agcgaagcta	tcacgatctg	ggggaaaccc	atgtatctgc	tggtgaggtg	87180
gaagtggcgg	atgagcccct	tgctcaccag	cagcctgttg	acgttgacga	tcgaacaaca	87240
accggtcagt	cctgcattat	gacattcatg	cagctacttg	ttttgttttt	ctcttttggt	87300
cagcattagc	ttagcttata	tcattttctt	acctttttcc	ttcttccttg	ttgtctctag	87360
caaaacccaa	cagtttagcga	agaatgctcg	atgggtgctga	tctcgctctt	agatgggtgat	87420
gatgatcagc	tccccgttgt	gagctctcct	ggctgcctgt	agtgcctgat	ccggagtcct	87480
ctgctgcatt	ttccacctcc	cgtgttgagg	tcagttcagt	atctccccta	agtcaccatg	87540
ccggatattg	tttgtttcta	tatgatttga	ttagtaggat	gcttttttgt	tttgaaattt	87600
tgtatcatga	ttggttggag	cgtgtgatta	ggtttcttac	agttgcagca	gaggtcgat	87660
tttgttttaa	tgtgcacacc	agatgttcgt	ccaaatgtct	tgtcaaaatt	tttttatctt	87720
ttgatttgtc	aagtatttat	gattcgcaat	atgaaacatc	gttggtcagg	atctgtgctg	87780
cacgtatcga	tgcaatgtaa	tgatccaagt	gacggttccg	tttgttcgtt	atcttcttat	87840
caatttaggc	cctgtttttt	tcagcttggg	atttttataa	tctagattat	tgagtcagat	87900
tactataaac	tagattgtta	taatctgtag	tagaataagc	ggtagtttgt	ttctttccta	87960
gattattaga	gcctagatta	ttgggtttac	aagtctaaag	agggactggg	gtggcatggt	88020
gggtaatttt	tcactcaata	atccggaaaa	agctcaccta	aatgagctta	tcagattaga	88080
ataagctggg	ttccagatta	taataagcta	cttcaataag	ttatctgttt	ctttcagctt	88140
actcccaata	atctggatta	taataatccc	aagctgaaag	aaacagggtc	ttagtgttcc	88200
gtaccagatt	ttcaaaaagg	aactaatatt	tcttaccac	catttatgat	gtaatctctc	88260
tatccactgt	cataccgtgt	tacctgtaga	ctgtagtctg	tagacataaa	aaaaaagtac	88320
ctttttggtc	tctgaaacat	ttacctgtat	ctatcgactg	gtctccaata	tatccttttg	88380
ttttcgttca	atttgaaacg	gccttctttt	tgccaatcca	ttaaagaact	ggtttgcgaa	88440
tgtttagttt	gagagtagct	tgaccaaatg	ggccttaagc	ctgattgcag	tggattttac	88500
ttgctcaggg	taaaaccaa	ttaaaggatc	atgttcattc	tcaggaatct	ctagcatgga	88560
atgagaacaa	aaatcataac	aatggtcaag	gtaacaagac	tgaaccaacc	accatggcgc	88620
taatcatcga	tctgaaataa	catcggaact	tgaaagcttc	agaacgtcca	tcgtatatct	88680
gtcagtgcgt	gcaaactctg	aagtctgaac	tgcaagtag	tcatcaaggt	cgtagtctcg	88740
tagatatgat	gttcgttacc	aatacctgtt	tctaactgat	tcctttatgt	ttttccggtc	88800
attttctctc	agttttatgg	aacactattc	agctggggac	tagatgtgga	acggagtaca	88860
ttagacgcac	gaatgcatgc	attgatgcat	agaatacggg	tcttgagggg	atacgcgtag	88920
gctacgatag	cataaattaa	aattttctac	cgcgtaaact	aagaaccata	caaataattag	88980
atcatagatc	gttaccactc	gacgcgctgc	gcagtgggaag	aaagcgctaa	aaaggcggaag	89040
gaaccctcgc	gatatagcgc	gcacgatgtg	tgaagaagta	gtcgatcgta	ccggctcgac	89100
ctttctcctc	tcgtgcgttc	tcctcgccgt	actcccacgc	cgatcagtac	cgcaaagcac	89160
tggcgctctc	accggtatcc	acacgtacag	ggacggaacg	ccatgtgcag	atgtgctagc	89220
acctgcgcac	ggctaggggt	ttgctcgggg	aagggagtg	cggctagggg	ttctcacgtg	89280
atgcaatgtc	tccgcgggtc	acaccctca	cgaatatata	ggatccatga	ctcgggcctc	89340
caaggcccg	gggactccta	ttcggatccc	tatccgaatt	aagctcatac	tggatctcca	89400
tccaatcccc	ttattccggc	ccattaagtg	tgcgccctcg	taggttcatg	cacactcggc	89460
tgtaacccga	aaactctttt	tggtccacgt	gtcaacagtg	gcccctagca	gaacgtattg	89520
accgaacggg	catatacaaa	catcatatcg	gttgaacctc	tagtgataac	ttgtatgaac	89580
ctctttgcct	cacgagatcg	attaagctca	aggctagata	tgtgccatcc	tctaataact	89640
caatcattca	ctcgaacctg	tgatagatta	cataactcat	gattgtcctc	aaccaccttt	89700
ggcatggcca	tgcattttca	taatctataa	catcgaggga	cccagagata	tctctccata	89760
aaaggggcaa	atcccatctt	gattattcat	atctcactac	acgtttcata	gcataaccga	89820
aaactacttt	tataactacc	caattacgga	gtagcattta	gcagtcctta	agtaagctac	89880
tacacatgtt	gagaacacatg	ataatctcag	gtctaaggat	tcaacaccaa	cactaaatga	89940
gatcactgat	gacacaacac	atatgtctct	tgcatgtgtc	catgttgggt	ctatccaaca	90000
atatgtttcc	caacatgtgt	ccacattatt	aatttgggt	ctctatacca	taatccataa	90060
gacatgatca	tcaattaata	catgtgctga	tcattaaaca	tatttgtttc	acatatgata	90120
tttgatcagg	gatcttttag	aaatagcaac	atacaacata	aagagtctca	taaaagaatc	90180
acatatcag	taaccaataa	tgagttatct	attttaagga	acaatgtcgg	ataaatatgt	90240
aaacataata	tatgatacaa	tcactctctat	tattgcctct	aggacatatc	accaacaggt	90300
ctgcaatgca	gtgatgatga	cacctgtgca	aaatatattca	gtcaggggaa	tcaggatcac	90360
taaaagatgt	cgatgttgcc	tctctggaat	gtatgacatc	tcacttctca	ggaaggattg	90420
gagccgggtc	cgccatcaga	aatcacaacg	gccagatttc	tgtgtcattg	agatgctata	90480
tgtatcgga	gacttcagat	aaaaaaatat	cttctcatct	ccaggttact	gaacaacgga	90540
gagtcatctt	actcctatat	gctactttta	actttcacta	gctagtctgt	atgattgatt	90600
tgtttccctt	tttttttttg	cacttacatt	tgtaaatgta	tatgtgtgta	tatattagga	90660
tagagggccc	attttgga	tgatatgtg	tactgttgaa	ctaagtgtga	ccagaatatc	90720
tgaattcccc	caacattatg	aattgcgctg	gatctagatc	accacgagaa	gctaagcgcg	90780
ttgtgtggc	gggattgggc	gcttcaaaaa	ctagatgata	ccccgcgcgt	tgctgcggga	90840



ttttgtaggt	agaaatggag	agctacacgt	ggaggcataa	gagataaatg	taatagtagc	90900
cattggaaat	ggtaatTTTT	ttcaaacaaa	caactatTtc	tgtaggatga	aatctataaa	90960
ctggagtagc	aacatccgtg	aaggTTaaga	tagcattTct	cagatatagt	aatagcaacg	91020
caagagatac	taattTTtgat	tattggtatt	gacctTctct	tcagttagac	tgcatttgag	91080
gtaatccatt	TTTTatgtaa	gaaatgTTag	aagcatatga	gggtcagaga	tagcttcagt	91140
ttgttgaggT	tatagaagaa	tccatttgag	caactgcac	catgttcaact	tgtgaagaac	91200
agacaaatga	aaaatgagca	acatctcgTt	tgaagTttg	aggattcctg	aagggaagag	91260
caataaatgg	caaagtatag	acaatacgac	gatgcaaaaag	aagctagaag	cagtttagcat	91320
gacaacaaag	aacgcatacg	gttaacatga	caacagagaa	tgcaaggTac	caggaaggca	91380
ggaatagagt	aatagagaaa	ataatgtaat	aggagtaaca	tttattaatt	ggtgattaat	91440
gataaacctgc	tggTtggttc	ttgttgaaTa	tccatgtgtt	ggaataagaa	taaagctgtt	91500
gagaatagga	gaaatgaaag	ggagTtgTca	taaggagaaa	cataatggTg	tatgtgatac	91560
ttatagaggT	tgagtagtaa	tgtggtatcg	aatcgTgccc	aattgttcat	cacagaataa	91620
taatcaaaac	cacctTtgat	tttacaaaaa	taatatctga	tttattgtTa	actgcttatt	91680
gaattagcat	taaacagtac	aatcagagTa	gctaattgaa	tctgtggagg	tgtggccctt	91740
tgcctaactt	tttatgcacg	tttatgcatt	tttattaatt	tattgaaTca	acatagtTga	91800
acctctatct	atccctttac	cataaaagTaa	attcaaaagaa	aaaaaacaat	gtttatcttc	91860
tcatgttaag	tgtTgttaga	atgtctgaat	cagaacccat	cttaattTtc	tctgtTtctt	91920
aggatatcaa	tcatgtctTa	gagctgaaag	tttgtatcaa	cagaaacaca	ataacttgTa	91980
gtattTtggg	ctaaaagatc	cataaaactg	aagataaata	gtcagatggc	cttgatgaat	92040
aacccaatgt	ttgacaaact	gttcaattTt	gctattacaa	atagcattct	ttatactcta	92100
gccagaaaaa	aaaatgaaaa	atggatataa	agtaggatca	tcatatacca	aagaagaatc	92160
aggatagata	tatcaaaaat	tagggatcga	tgtgtatgaa	aaatagctag	acagtgtTgt	92220
tatggaagga	ataacttgTa	cctctTgcga	agcaagtgtc	gcagtatggg	catataataa	92280
tatatagaaa	tcaagtTacc	atgaatgaat	atggggcaat	tatgattacc	caatgtatat	92340
acagattgct	ccagctgtTg	ctttggatgg	gaatgtcatg	gggactaatc	tcagcggtag	92400
cccatagtTg	ctgatgcAAC	aatagtTaagc	aatctgctaa	tggaaaacaa	tctgcatccg	92460
gaattcataa	ggtatatact	gcgtgatgTa	aaattggTat	acataccaat	gatcctcata	92520
ccatgaattg	tctcctTtag	tgaagtgtat	atactaaata	aatttcaatc	cggttgaacg	92580
gagacggtag	aaacctgaaG	tagagccgaa	acaaaaccaa	tccctcctt	cttaattctt	92640
gaagaatatg	aggaataaca	taaacaagtc	aatctagtgt	gaccgaaagc	agaagccaat	92700
ttattggatg	aaaaatatat	ggctcataaa	gaggaagaag	cataccttcg	ggaggttggt	92760
gtgttcgagg	tgaaggggag	gttgaagatt	tcaggggagg	aagaaactaa	gacaacaaat	92820
cgaacgacgt	tttgtggtga	ggagctcgac	atccatgaaa	tctgatcggT	ttttaatgtt	92880
ggccattaaG	actgctcgTt	ggtgggtgcc	ggcagTtct	gtcttttTgt	atatgccgag	92940
gaggcgagca	gcctaggagg	tgggatggag	cgaggaggtt	ggggaaacgg	cgcggtggt	93000
gggccagTtg	cgtgcgcgcg	cggaggtTgg	ggaaagTtgg	ctcgacggag	acacaggatc	93060
gtcggggagg	gaggaggaag	gagagatgcg	cggctgagat	gaactcgcct	ctcgcgtgcg	93120
cgtaggggaa	acggtccggc	catgacgcgc	agctggcata	cccgtcgcac	gcgcgcgcgc	93180
ccagggggaa	cccggcgcgg	cggagtccgcg	gagaccgcgg	ctggtgccgg	taggaagcac	93240
gagcgcaaga	gaccgatcga	ttgccctggc	tttggagtgg	ataaggTtcg	ggaaacggaa	93300
cctagtgcct	gaatgctgag	agtgagattg	aacctcactg	gttaggtaat	aggacgagTa	93360
aacgagaagt	caacccaaaa	cattggaatt	cggatacagg	gtacagatgg	acaatatTgt	93420
taaacattgg	aaagccaacc	caaaacaaag	ggcagatctc	gaggtgtagt	ggacagagac	93480
tggggaggcc	cggcatccaa	accacataa	cacgcctTtt	ttaaaaaaa	acaaaatgag	93540
gcacaaactg	taaaatccac	ctaacacgtg	atataggcgc	cagctaagtg	ctaacgttag	93600
agcaggTaca	atagcaggct	atatgccagc	tgtaaacata	ttttaagaag	ataaatcagg	93660
agagagaaga	gcacggggct	acagattTgt	agccagctgt	agcacgaact	ccaagacgcg	93720
gtgtgtctat	gacaggTggg	gctaggTatt	aatagtgtag	tatgtaacta	tagtatgaat	93780
gagctattag	attggctata	gatgaattag	agctagtagt	tggctatact	attgaacttg	93840
ctcttagggg	aatatggTtg	tccccctgtg	cgttagtgcg	tacagtgatg	tgaactacta	93900
taagagcagg	tacaatagtg	gactatttagc	cagttgtaaa	tatatTttaa	tgagataaaa	93960
gatgagagag	aagagttagct	ggctacagat	ctgtagccag	ctgcagaacg	gactccaaga	94020
cgtaattgtg	gtatgacagg	tgggaccata	tattaatagt	atagtaagca	actattgtat	94080
aaattggcta	ttagattggc	tatagattaa	ttggagctag	taatgggctg	tactattaaa	94140
cttgctctaa	tgataatcct	ctctgcttga	attgttcagt	gtaaaagcta	gctacaaatt	94200
ctgattgcag	agccagaaga	gccagtcgca	ttgtcctatc	tcctttgcgg	ttgtgagctg	94260
cttgctgttc	tgagcgtgaa	ccgtgaaggg	agatctagtc	gaggagagtc	gatggcggag	94320
acggtgctga	gcatggcgag	gtcgtggtg	gggagcgcca	tcagcaaggc	cgcctccgcc	94380
gctgccgacg	agaccagcct	cctgctcggc	gtcgagaaaag	acatctggTa	cgtaatatgt	94440
actgtggctc	tcgtttatTc	tgtactagtc	tactgatcga	catttatTgt	atcgacatcc	94500
ttcttagcct	cagttTtTgt	ggccatcaat	cctgatcgga	acaaatcact	aagtcaagca	94560
aatcaattga	tgagtgcaca	aactTTTTtt	ttttgcatga	ccaatcttga	gttcttgagg	94620

ggcgaaacag	acgcacccga	ccgcagtcac	cctctccctc	ctcccacagt	cccactcctc	94680
ccctccgcct	tgcgcgtacc	cgagcgaccg	ccggaaagcc	aagtggctgc	aaggacgggtg	94740
gcggtggggc	atgctctctc	tctctcgccg	ctgcaaagga	gggggcaccg	tcgcatctag	94800
gatggcacaag	gcgtctccac	gccagtcaga	tccggtgagt	ggctggcaga	aaacgagggc	94860
gaatagcgga	gggcccagcc	agtgcctggt	gtggctagca	acatgggagg	ctagcgatgc	94920
ggtagcaagc	agtgggtgta	actacaaatc	tatagctccc	ttgccagatc	tgacgacccc	94980
gcaaccggat	ctggcgatgg	cccaacgggtg	tcggaggcta	cgcatccgag	aatgttttgg	95040
taaggcgacg	gcacaatcgt	gcgacgaccg	gtaatccatg	ggggtgagga	ggcaacaagg	95100
tgcaaccaag	gaagcaccgt	gacatgccga	ggaggatgcg	gcggctcgcc	atgagtggat	95160
ctggaagcga	catagttagc	tagatttggg	gggcggggtc	gcagcagcaa	catgtgccgc	95220
cgatgcgatg	tggcagtgcc	tgcttgagat	gccagatggg	gcccattgta	tggaggccag	95280
aggagcagcc	agtgggcccga	cggggaggat	gcaagggtgtg	gtgggctgca	gcgacggctc	95340
ggtgcgagca	agagcgacgt	ctgtgcatgc	tgggacatcc	tagcggggcg	gcgtgatggg	95400
aggaggtcgg	cagaaaaaat	agcgtgccac	ggaagggtggg	gccatggctg	gtcggcgggtg	95460
gggcatcggc	gcagcgaacc	cacaggctag	cggaggctgt	tggggtgggtg	gaacgcaggg	95520
gtggtgatga	cagggaaagg	tgaaaaatcta	gctcgggtgt	tcacgaggcc	ggcaacgatg	95580
acacgttcaa	gcgcgctctt	cccccttgg	ggcggtgtcg	agctatgacc	ctctccctcc	95640
tcacaggact	ctccagatga	aaacctagtc	catttagatg	ggtcatggcg	gcaacccttg	95700
catcatgatc	ttcttggagg	cattgtccag	gaggtcttgt	ttctcacct	tgcaatgccc	95760
cgatcatttt	tgtctttggg	attctttcag	tcgttgtcat	cgggttaccg	tgagggacaa	95820
gtggattgtc	ttgtctctct	cgcctctca	ctcctcaacc	cttctacgtg	ataatgattg	95880
ggagcccgtt	gatgaccttc	tatttggatc	tagtgctcgg	tggggccttt	gcaacctagt	95940
gtaggactag	cggtagctcg	tcacgcatag	aggcggtcgg	ttcgggtgcta	gtgcttctct	96000
tggggtagtg	aaggagtcgc	tagaatgtgg	tgggtgtgctt	tttatttttc	cttccctga	96060
ttataacctt	ctagggctgt	aattttgttt	tttttcttg	ctatattaat	atgaaacttc	96120
acactgcctt	gtgcggctcg	tttaaaaaaa	aaacttgagt	tcttgacact	ataagtatgt	96180
tagtagtgga	gtcgacatta	gtttatctaa	aacatctctt	catatatatg	aaggccacta	96240
atgatttttc	tttcctaggg	aaccaaagtt	ccgcggtatg	ttaatccaca	aatccccctg	96300
taagataacc	tatggcaaat	gaactaaagg	catgtacaat	gataataatt	aataggagaa	96360
tcttaacatt	tctaattagt	tctaattagg	aattattaact	gatatggaag	agagagagag	96420
agaaagagga	gagatagaac	attgttgtta	tggttaaaca	tggctcagca	actacttgcc	96480
tctttaaaat	ggaaacttgg	ttgcgagggg	gaaaaaaagg	aaagaatatt	agtaaagaat	96540
atattttttg	tttagtagtt	aaaatatttg	ttgtctcaat	tgtttaaggg	cacactctaa	96600
ataattttgt	gttatctaag	agtccatacc	atgcagagga	cccgctttt	ccacgtggac	96660
aaccagagca	gtaacaaacc	ctagcgcttc	cacccctta	gatgggctgt	ggcggcgctt	96720
tcggcattgc	gttttctttg	gaagtatcat	ttagaaaaatc	ctattattgc	ctagcctgcc	96780
ttaagggaagt	tcaggcgaca	cccttggatg	gcgagtgcg	agagcccgtg	gatgtttagt	96840
tgtttagaca	tgggtgttga	cggctgaatg	gtgggcctgt	tgtaggtatg	gtggcatctg	96900
gcaaccagtc	atgcttagca	atagattcct	atgcagaaga	cattcgcaat	caatcagctc	96960
gaaatgtgga	tgaagctgag	cttgttgggt	tttctgactc	caagaaaagg	ctgcttgaaa	97020
tgatcgatac	caatgctaag	gatggctccg	ccaaggtaat	ctgtgttgtt	gggatgggtg	97080
gtttaggcaa	gacagctctt	tcgaggaaga	tctttgaaag	cgaagaagac	attaggaaga	97140
acttcccttg	caatgcttgg	attacagtgt	cacaatcatt	tcacaggatt	gagctactta	97200
aagatatgat	acgccaaact	cttggcccca	gttctctgga	tcaactcttg	caagaattgc	97260
aaggggaagg	ggtggtgcaa	gtacatcatc	tttctgagta	cctgatagaa	gagctcaagg	97320
agaagaggta	ctttgttgtt	ctagatgatc	tatggatttt	acatgattgg	aattggataa	97380
atgaaattgc	atttcttaag	aacaataaga	agggcagtc	aatagtaata	accacttgga	97440
atgttgatct	tgcggagaag	tgtgccacag	cctcactggg	gtaccacctt	gatttcttgc	97500
agatgaacga	tgccataaca	ttgctactga	gaaaaacaaa	taaaatcat	gaagacatgg	97560
aatcaataaa	aaatatgcaa	aagatgggtg	aacgaattgt	aaataaatgt	ggtcgtctac	97620
cattagcaat	acttacaata	ggagctgtgc	ttgcaactaa	acaggtgtca	gaatgggaga	97680
aattctatga	acaccttcct	tcagaactag	aaataaaccc	aagcctggaa	gctttgagga	97740
gaatgggtgac	cctaggttac	aaccacctac	catcccatct	gaaaccatgc	tttttgtatc	97800
taagtatctt	tcctgaggat	tttgaatatca	aaaggaatcg	tctagtaggt	agatggatag	97860
cagaagggtt	tgtaggacca	aaggttggga	tgacgactaa	ggatgtcgga	gaaagttact	97920
ttaatgagct	aatcaaccga	agtatgatcc	agcatcaag	agtgggcata	gcaggaaaaa	97980
ttaagacttg	tcgaattcat	gatatcatcc	gtgatatcac	agtttcaatc	tcgagacagg	98040
aaaattttgt	attgttacca	atgggagatg	gctctgattt	agttcaggaa	aacactcgcc	98100
acatagcatt	ccatgggagt	atgtcctgca	aaacaggatt	ggattggagc	attattcgat	98160
cattagctat	ttttggtgac	agacccaaga	gtctagcaca	tgcagtttgt	ccagatcaat	98220
tgaggatggt	acgggtcctt	gatcttgaag	atgtgacatt	cttaatcact	caaaaagatt	98280
tcgaccgtat	tgcatgtgtg	tgccacttga	aatacttgag	tattggatat	tcgtcatcca	98340
tatattcact	tcccagatcc	attggtaaac	tacagggcct	acaaactttg	aacatgccga	98400

```

gcacatacat tgcagcacta ccaagtgaga tcagtaaact ccaatgtctg catactcttc 98460
gttgtagtag aaagtttgtt tctgacaact ttagtctaaa ccaccaatg aagtgcataa 98520
ctaacacaat atgcctgcct aaagtattca cacctttagt tagtcgcgat gatcgtgcaa 98580
tacaatttgc tgaattgcac atggccacca aaagttgctg gtataaatca ttcggtgtga 98640
aggtacccaa aggaataggt aagttgagag acttacaggt tctagagtat gtagatatca 98700
ggcggaccag tagtagagca atcaaagagc tggggcagtt aagcaagctg aggaaattag 98760
gtgtgatgac aaatggctcg acaaaggaaa aatgtaagat actttgtgca gccattgaga 98820
agctctcttc cctccaatat ctctatgtga atgctgcagg aatctcagat ggtggaacac 98880
ttgagtgcct agattctatt tcctctctc ctccctact gaggacactc gtgttgtatg 98940
gaagtcttga agagatgcct aactggattg agcagctcac tcacctgaag aagatctact 99000
tattgaggag caaactaaag gaaggtaaaa ccattgctgat acttggggca ttgccaacc 99060
tcatggctct tgatctttat cggaagctt 99090

```

```

<210> 14
<211> 1214
<212> DNA
<213> Oryza minuta

```

```

<220>
<221> misc_feature
<222> 806, 835, 891, 906, 946, 964, 970, 991, 997, 1018, 1060,
1091, 1125, 1129, 1131, 1148
<223> n = A,T,C or G

```

```

<400> 14
gatttgagga cggcagctca cccctgttgg aaaagataga aataggcgag tgcagggttg 60
aatctgggat tactggatc attcaccttc caaagctcaa ggagattcca attagatacg 120
gaagtaaaagt ggtgggctt ggtcagctgg agggagaagt gaacgcacac ccaaatcgcc 180
ccgtgctgct aatgtacagt gaccgaaggt atcacgacct gggggctgaa gccgaaggat 240
cttctataga agtgcaaaca gcagatcctg ttcttgatgc cgaaggatca gtcactgtag 300
cagtggaaagc aacggatccc cttcccagagc aggagggaga gagctcgag tcgcagggtga 360
tcacgttgac gacgaatgat agcgaagaga taggcacagc tcaagctggc tgacgatctc 420
ctcccccatc agcgtcgtca tcagcgagca gaaaggcgag agcttccctg cttctgcgtg 480
cacctcaccg ctctgactcg gagggacatg atgatcaatg aggttccag tttccaaatg 540
tgtggctaac acaccaggtt gtccctatcc gagaaaccaa gttgattgca ttgtggaggg 600
gaatatgaga tcagaaatca aatgagagtt tgctaggatg gtgatgtggt catgtggatg 660
atcaaattgga ctacatcaga cgcacacac tgctgcccac cctttaccca ctgtagacaa 720
atggagtgca ggctctaacc caggccagaa gtttgttcag tgttcttgtt ccaaaataaa 780
cattctggat ggcaaaatga cttgtnttaa tgggtgaagc tgcaattttc caggntcatt 840
tttggctgaa cccaaattgg tggcttgag gctggagctg catgacatca nagataacaa 900
tggcnccttt ttgttgccat ggggtgaggt acatggatca tgccgntaag cctttactcc 960
gagntagcan aaaactggct ggctgtagat ngagttngcc atcgccctca actttgtnga 1020
tgcatgagc atcatggata gatgtatgta cgtaaaaacn caaattttag tgattacaga 1080
acttattttt ntctttaatc agattattaa tcagtgggat tttntttnt ntagtactgt 1140
ataaaaanac ttttttatcg tcaatcctcc taaaattcct atttgaaaaa aaaaaaaaaa 1200
aaaaaaaaaa aaaa 1214

```

```

<210> 15
<211> 2422
<212> DNA
<213> Oryza minuta

```

```

<220>
<221> misc_feature
<222> 2014, 2043, 2099, 2114, 2154, 2172, 2178, 2199, 2205, 2226,
2268, 2299, 2333, 2337, 2339, 2356
<223> n = A,T,C or G

```

```

<400> 15
aggaataatt aagacttgct gaattcatga tatcatccgt gatatcacag tttcaatctc 60
gagacaggaa aattttgtat tattaccaat gggagatggc tctgatttag ttcaggaaaa 120

```

cactcgccac	atagcattcc	atgggagtat	gtcctgcaaa	actggattgg	attggagcat	180
tattcgatca	ttagctattt	ttggtgacag	acccaagagt	ctagcacatg	cagtttgtcc	240
agatcaattg	aggatgttac	gggtcttggg	tcttgaagat	gtgacattct	taatcactca	300
aaaagatttc	gaccgtattg	cattgttggtg	ccacttgaaa	tacttgagta	ttggatattc	360
gtcatccata	tattcacttc	ccagatccat	tggtaaaacta	cagggcctac	aaactttgaa	420
catgccgagc	acatacattg	cagcactacc	aagtgagatc	agtaaaactcc	aatgtctgca	480
tactcttcgt	tgtataggac	agtttcatta	tgacaacttt	agtctaaacc	acccaatgaa	540
gtgcataact	aacacaatat	gcctgcctaa	agtattcaca	cctttagtta	gtcgcgatga	600
tcgtgcaaaa	caaattgctg	aattgcacat	ggccacccaaa	agttgctggg	ctgaatcaat	660
cgggtgtgaag	gtaccccaaag	gaataggtaa	gttgcgagac	ttgcagggtc	tagagtatgt	720
agatatacagg	cggaccagta	gtagagcaat	caaagagctg	gggcagttaa	gcaagctgag	780
gaaattaggt	gtgacaacaa	acgggtcgac	aaaggaaaaa	tgtaagatac	tttatgcagc	840
cattgagaag	ctctcttccc	tccaatctct	ccatgtggat	gctgcaggaa	tctcagatgg	900
tggaacactt	gagtgccctag	attctatttc	atctcctcct	cccctactga	ggacactcgt	960
gttggatgga	attcttgagg	agatgcctaa	ctggattgag	cagctcactc	acctgaagaa	1020
gatctactta	ttgaggagca	aactaaagga	aggtaaaacc	atgctgatac	ttggggcact	1080
gccaacacctc	atggtccttc	atctttatcg	gaatgcttac	cttggggaga	agctagtatt	1140
caaaacagga	gcattcccaa	atcttagaac	actttggatt	tatgaattgg	atcagctaag	1200
agagatcaga	tttgaggacg	gcagctcacc	cctgttggaa	aagatagaaa	taggcgagtg	1260
cagggttgaa	tctgggatta	ctggtatcat	tcacctcca	aagctcaagg	agattccaat	1320
tagatacgga	agtaaaagtg	ctgggcttgg	tcagctggag	ggagaagtga	acgcacaccc	1380
aaatcgcccc	gtgctgctaa	tgtacagtga	ccgaagggtat	cacgacctgg	gggctgaagc	1440
cgaaggatctc	tctatagaag	tgcaaacagc	agatcctgtt	cctgatgccg	aaggatcagt	1500
cactgtagca	gtggaagcaa	cggatcccct	tcccagcgag	gagggagaga	gctcgcagtc	1560
gcagggtgatc	acgttgacga	cgaatgatag	cgaagagata	ggcacagctc	aagctggctg	1620
acgatctcct	cccccatcag	cgtcgtcatc	agcgagcaga	aagggcagag	cttccctgct	1680
tctgcgtgca	cctcaccgct	ctgactcgga	gggacatgat	gatcaatgag	gcttccagtt	1740
tccaaatgtg	tggctaacac	accaggttgt	ccctatccga	gaaaccaagt	tgattgcatt	1800
gtggagggga	atatgagatc	agaaatcaaa	tgagagtttg	ctaggatggg	gatgtgggtca	1860
tgtggatgat	caaattggact	acatcagacg	catcacactg	ctgcccaccc	tttaccact	1920
gtagacaaat	ggagtgcagg	tcctaaacca	ggccagaagt	ttgttcagtg	ttcttggtcc	1980
aaaataaaca	ttctggatgg	caaaatgact	tgtnttaatg	gttgaagctg	caattttcca	2040
ggntcatttt	tggctgaacc	caaattgggtg	gcttggaggc	tggagctgca	tgacatcana	2100
gataacaatg	gccncttttt	gttgccatgg	gtgagggtac	atggatcatg	ccgntaagcc	2160
tttactccga	gntagcanaa	aactggctgg	ctgtagatng	agttngccat	cgcctcaac	2220
tttgtngatg	cgatggcgat	catggataga	tgtatgtacg	taaaaacnca	aatttttagtg	2280
attacagaac	ttattttnt	ctttaatcag	attattaatc	agtgggattt	ttntttntnt	2340
agtactgtat	aaaaaanactt	ttttatcgtc	aatcctccta	aaattcctat	ttgaaaaaaa	2400
aaaaaaaaaa	aaaaaaaaaa	aa				2422